Reporting for Contact Center Troubleshooting and Maintenance Guide

BCM50 3.0
Contact Center

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NORTEL

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How to Use this Guide 1

Introduction

This guide is designed to allow a Nortel Customer, a Nortel Partner, a Network Administrator, or Support Personnel to maintain and troubleshoot Nortel Reporting for Contact Center.

How this Guide is organized

The *Reporting for Contact Center Troubleshooting and Maintenance Guide* is organized into the following chapters:

How to Use this Guide	Provides a brief overview identifying the organization of this guide.
Introduction	Provides an overview of the *Reporting for Contact Center Troubleshooting and Maintenance Guide*. Information is also included on getting help from Nortel.
Flow Charts	Flow charts to aid the user in troubleshooting a problem encountered in Reporting for Contact Center.
Raising a Case: Information Gathering	Details the information from Reporting for Contact Center and the Contact Center to gather for Nortel Technical Support when troubleshooting a problem.
Web Host PC Troubleshooting	Typical problems and solutions for troubleshooting a Web Host PC, for example, backing up and restoring the MySQL database, using anti-virus software, and so on.
Client PC Troubleshooting	Typical problems and solutions for troubleshooting a Client PC.
BCM and CCRS Troubleshooting	Typical problems and solutions for troubleshooting the Business Communications Manager (BCM) and Contact Center Reporting Server (CCRS).
Glossary	Glossary of terms used in this guide.
References	Lists documents referenced in this guide.
Index	Provides a cross-reference of topics in this guide.

Introduction 2

The *Reporting for Contact Center Troubleshooting and Maintenance Guide* is to be used by Nortel customers and partners to troubleshoot any problems encountered in the Nortel Reporting for Contact Center client application reporting tool that is a component of the Contact Center.

About this Guide

Where a symptom indicates a problem with Reporting for Contact Center this guide, which is divided into appropriately named chapters, enables the user to quickly refer to a particular section. For instance, if the user sees an issue on the Web Host PC, the reader can go directly to the Web Host PC Troubleshooting chapter, and look up the relevant topic to troubleshoot.

Alternatively, the user can troubleshoot a problem encountered in Reporting for Contact Center by using flow charts. These are provided in the Flow Charts chapter, beginning on page 13. The flow charts cover several areas of Reporting for Contact Center from the installation and connection of Reporting for Contact Center to print schedules for reports.

If a problem can not be resolved in this guide, the user is advised to consult Nortel Technical Support – this will be referred to as *Nortel Support* in the rest of this document. The following section, How to get Help, provides information on how to get help from Nortel for either Reporting for Contact Center issues, or issues with the Contact Center.

How to get Help

This section explains how to get help for Nortel products and services.

Getting Help from the Nortel Web site

The best source of support for Nortel products is the Nortel Support Web site:

http://www.nortel.com/support

This site enables customers to:

- Download software and related tools
- Download technical documents, release notes, and product bulletins
- Sign up for automatic notification of new software and documentation
- Search the Support Web site and Nortel Knowledge Base
- Open and manage technical support cases

Getting Help over the phone from a Nortel Solutions Center

If you have a Nortel support contract and cannot find the information you require on the Nortel Support Web site, you can get help over the phone from a Nortel Solutions Center.

In North America, call 1-800-4NORTEL (1-800-466-7835).

Outside North America, go to the following Web site and look up the phone number that applies to your region:

http://www.nortel.com/callus

When you speak to the phone agent, you can reference an Express Routing Code (ERC) to route your call more quickly to the appropriate support specialist. To locate the ERC for your product or service, go to:

http://www.nortel.com/erc

Getting Help through a Nortel distributor or reseller

If you purchased a service contract for your Nortel product from a distributor or authorized reseller, you can contact the technical support staff for that distributor or reseller.

Flow Charts 3

Introduction

The flow charts enable the user to troubleshoot problems encountered in Reporting for Contact Center. There are seven flow charts covering areas from installation of Reporting for Contact Center to print schedules of reports. The user is advised to go to the relevant flow chart in the area of Reporting for Contact Center where a problem has arisen. The flow charts are as follows:

1. Installing Reporting for Contact Center
2. Contact Center Connection
3. Historical Reports
4. Real Time Screens
5. Software Wallboard
6. Hardware Wallboard
7. Print Schedules

Questions raised and action items to be performed in a flow chart are explained in additional help provided directly after the flow chart. A key to the flow charts is provided, see the following section Key to the flow charts, which explains what the different shapes and colors represent, as well as what some of the content mean.

Key to the flow charts

Diamonds

These shapes are questions; they have either a **Yes** or **No** answer. Depending on the answer you will be redirected to an additional step:

No is represented with a red arrow

Yes is represented with a blue arrow

The yellow background indicates that there is more help available in this document for that question; this will be displayed directly below the relevant flow chart, as in the following:

Q) Is IIS Installed?

[Answer will be displayed here]

Rectangles

Remove RCC from Add/Remove Programs and Try again
From Add Remove Windows Components install IIS
Proceed to the CC Connection Flow Chart

These shapes are action items. You must perform the action detailed in this step. **Black** arrows direct you to the next step to take from here.

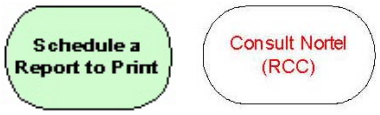
The yellow background indicates that there is more help available in this document for that action item; this will be displayed directly below the relevant flow chart, as follows:

From Add Remove Windows Components Install IIS

[Answer will be displayed here]

Rectangular action items with a green background indicate an important step in the flow chart. A rectangular action item with a blue background indicates that part of the flow chart is continued on another flow chart as specified in the step.

Ovals



These oval shapes are either the start point of a flow chart which will also be colored green, or a terminating action in the flow chart. Terminating actions require you to consult further with Nortel regarding the current problem. For further help refer to the How to get Help section on page 11.

The terminating actions display either, **Consult Nortel (RCC)**, or **Consult Nortel (CC)** indicating whether the Reporting for Contact Center (RCC) component or the Contact Center (CC) requires the initial focus of consultation with Nortel Support.

If you suspect a problem with RCC, collect the RCC logs. If you suspect a problem with the BCM, collect the BCM logs. If you are unsure whether the problem originates on the BCM or the RCC, collect logs from both.

Note: Various diagnostic logs are always running when Nortel Reporting for Contact Center is operational. The Logging Menu allows you to Archive the current log files and download any previously archived log files.

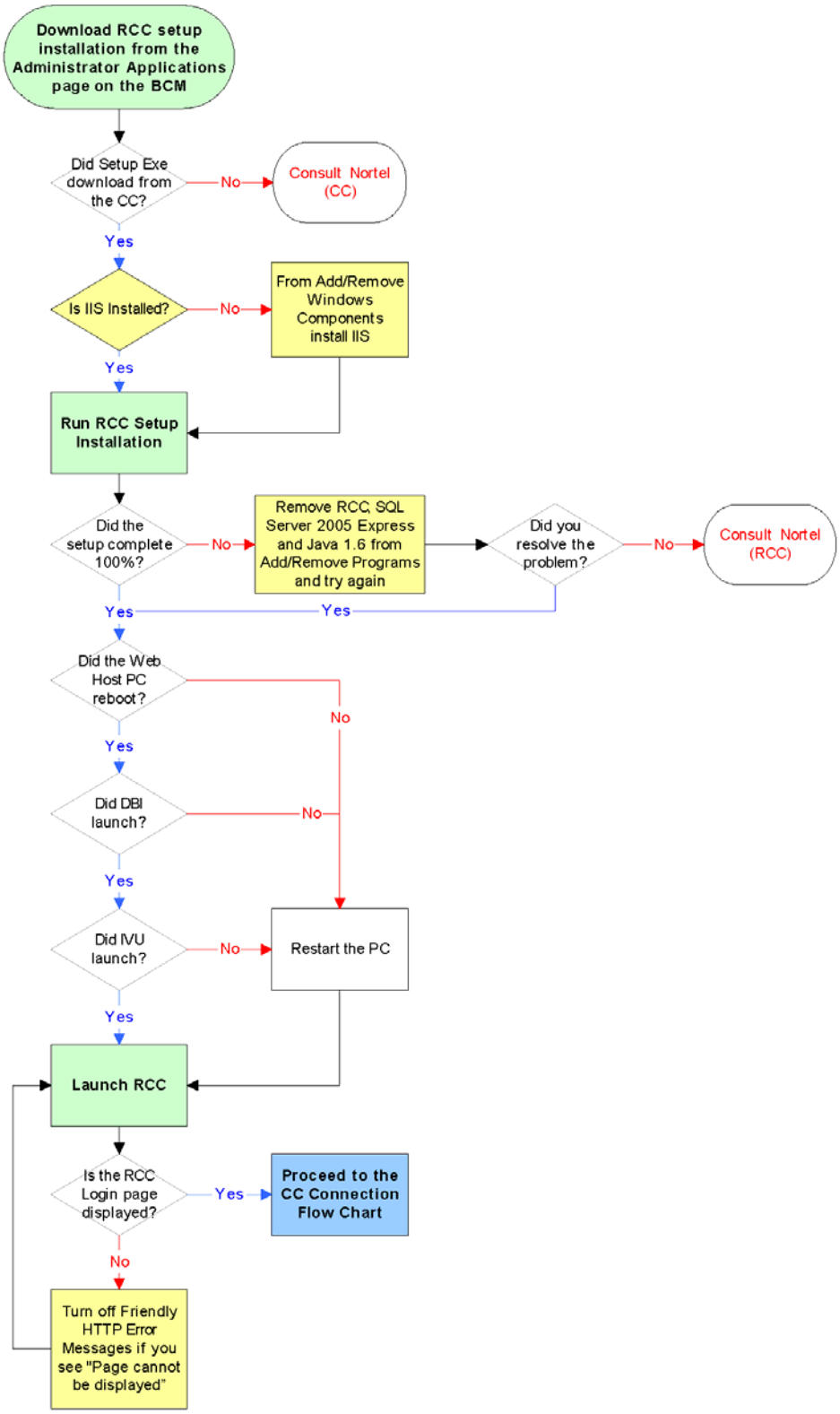
To Archive the current log files click the **Archive Logs** button. This will create a single .zip archive file of the current log files. A new entry will appear in the list of archived files table, following the **Log files location** on the Logging Menu page. Recently created log file archives are indicated by a yellow star. To stamp the Real Time log click the **Stamp Real Time Log** button. This will stamp the Real Time log constantly for 15 seconds. As the Real Time log can be quite large this option is useful for tracking down a problem to a specific time. Clicking the **Stamp Real Time Log** button will disable the button for 15 seconds. Stamping cannot be initiated again in this time until 15 seconds have passed. After this time has elapsed the button will be enabled. To download a log file archive click the **Download Logs** button next to the desired archive and save it to a location on your computer.

Note: The maximum number of archives you can create is 5. When a 6th archive is created it will automatically delete the oldest archive. The file naming convention includes (in the same order) the year, month, day, hour, minute and second that the archive was created, this can be used to determine how old the log file archive is. To view the contents of the archive you will need to have either WinZip, WinRAR or any other compatible zip file viewer installed. The default compressed folder viewer that comes with Windows XP and above will not work with these archives.

For the *ip***View** SoftBoard, logging is activated by echoing to the loop back IP address of 127.0.0.1. The log file is stored in the installation folder of the SoftBoard.

To retrieve logs of a hardware wallboard, set up an *ip***View** SoftBoard to echo to the hardware wallboard. Again, echo the SoftBoard to the loop back IP Address (127.0.0.1) to activate logging of the hardware wallboard. The wallboard log file can be retrieved from the installation folder of the SoftBoard.

Installing Reporting for Contact Center



Is IIS Installed?

Refer to the *Reporting for Contact Center Setup and Operations Guide* (NN40040-303) to check whether IIS is installed.

From Add/Remove Windows Components install IIS

Refer to the *Reporting for Contact Center Setup and Operations Guide* (NN40040-303) for instructions on installing IIS.

Remove RCC, Microsoft SQL Server 2005 and Java Runtime Envrionment 6 from Add/Remove Programs and try again

If the Reporting for Contact Center installation did not complete 100%, Reporting for Contact Center should be removed from the Web Host PC, then Microsoft SQL Server 2005 and finally Java Runtime Environment 6, as follows:

a. Click on **Start** > **Control Panel** > **Add/Remove Programs.**
b. Select **Reporting for Contact Center** and click the **Change/Remove** button to start the un-installation of Reporting for Contact Center.
c. Follow the on-screen instructions in InstallShield Wizard to remove the program.
d. Repeat steps b and c for Microsoft SQL Server 2005 and Java SE Runtime Environment 6.

Install Reporting for Contact Center again.

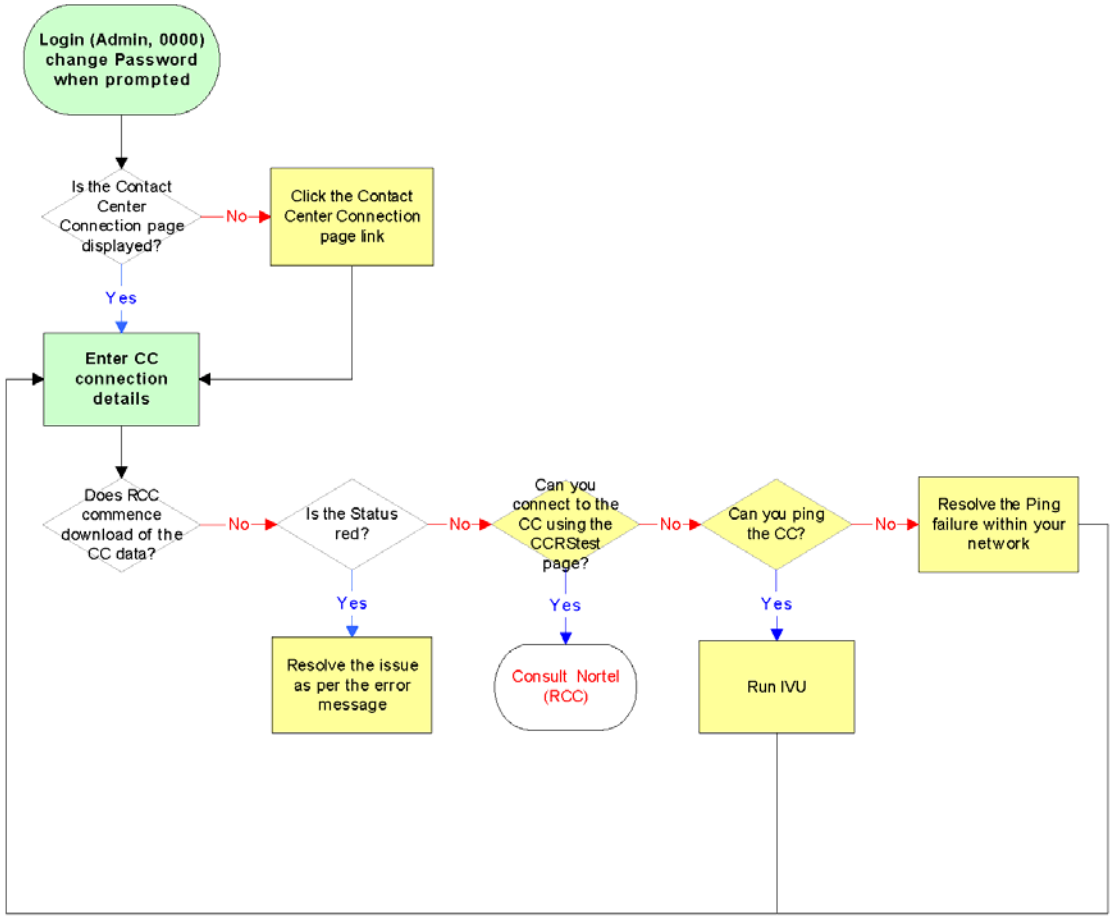
Q) Do you see “Page cannot be displayed” rather than an error message?

If **Yes**, go to step Turn off Friendly HTTP Error Messages as follows, or return to the Installing Reporting for Contact Center flow chart.

Turn off Friendly HTTP Error Messages

To see HTTP 500 error messages, Friendly HTTP Error Messages must be disabled in Internet Explorer. See Page cannot be displayed message on page 95.

Contact Center Connection



Click the Contact Center Connection page link

See Contact Center Connection page item on page 79.

Resolve the issue as per the error message

Note: For more detailed instructions on troubleshooting the following error messages refer to Error in Download Contact Center data window on page 79.

a) InvalidRequest - The request from the client application is not valid, restart the RCC Launcher.

b) VMServiceNotRunning - The Voicemail service is not running on the Contact Center. Restart the Voicemail service on the Contact Center through the Element Manager.

c) InvalidPassword - The password used by the client application is not valid. Enter the correct password, use the CCRS test page to check if you are not sure.
d) NoKeyCode - The keycode used to turn on the CCRS data stream is not present. Enter the correct keycode.
e) NoCCData – No data is present in the CCRSAppServer database. Configure at least one skillset in CallPilot Manager.
f) NoCCKeyCode - The keycode used to enable the Contact Center application is not present. Enter the correct keycode.
g) CCRSDisabled - The CCRS data stream is disabled. Enable the CCRSAppServer in the Element Manager.
h) ServerBusy - The server is too busy to handle the request (too many simultaneous users). Check that other Reporting for Contact Center clients are not communicating with the same Contact Center, restart the RCC Launcher.
i) CannotConnectToCC - The CCRS cannot contact the Contact Center.
j) CannotConnectToDB – The CCRS could not connect to the Contact Center database.
k) CCRefusedConnection - Indicates that the Contact Center refused to register the AppServer.
l) UnknownServerError – If none of the above, contact Nortel Support.

Q) Can you connect to the CC using the CCRStest page?

Refer to CCRS Test Page on page 117 for instructions on connecting to the Contact Center using the CCRS Test page.

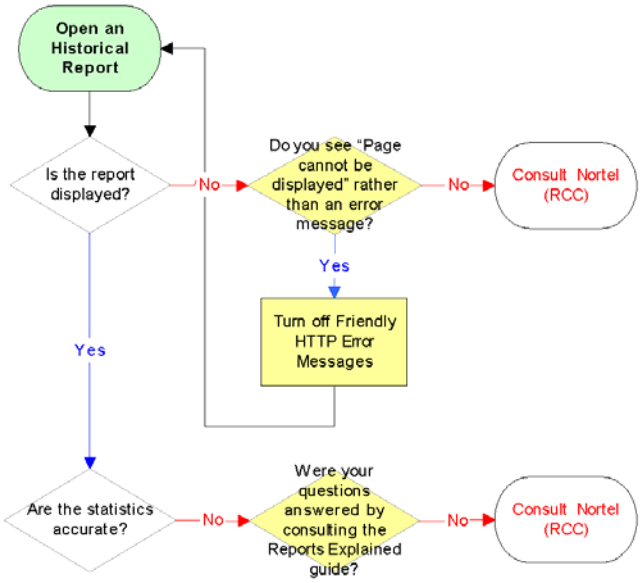
Q) Can you ping the CC?

Note: Ensure that any active firewall is not blocking ping requests.
From the Web Host PC, at the command line type **ping xx.xx.xx.xx**, where xx.xx.xx.xx is the IP Address of LAN1 or LAN2 of the BCM.
For further information on pinging to the Contact Center, see Pinging the on page 110.

Resolve the Ping failure within your network

To resolve the Ping failure, see Resolving pinging failure on your network on page 110.

Historical Reports



Q) Do you see "Page cannot be displayed" rather than an error message?

To see HTTP 500 error messages by disabling friendly HTTP error messages in Internet Explorer see Page cannot be displayed message on page 95.

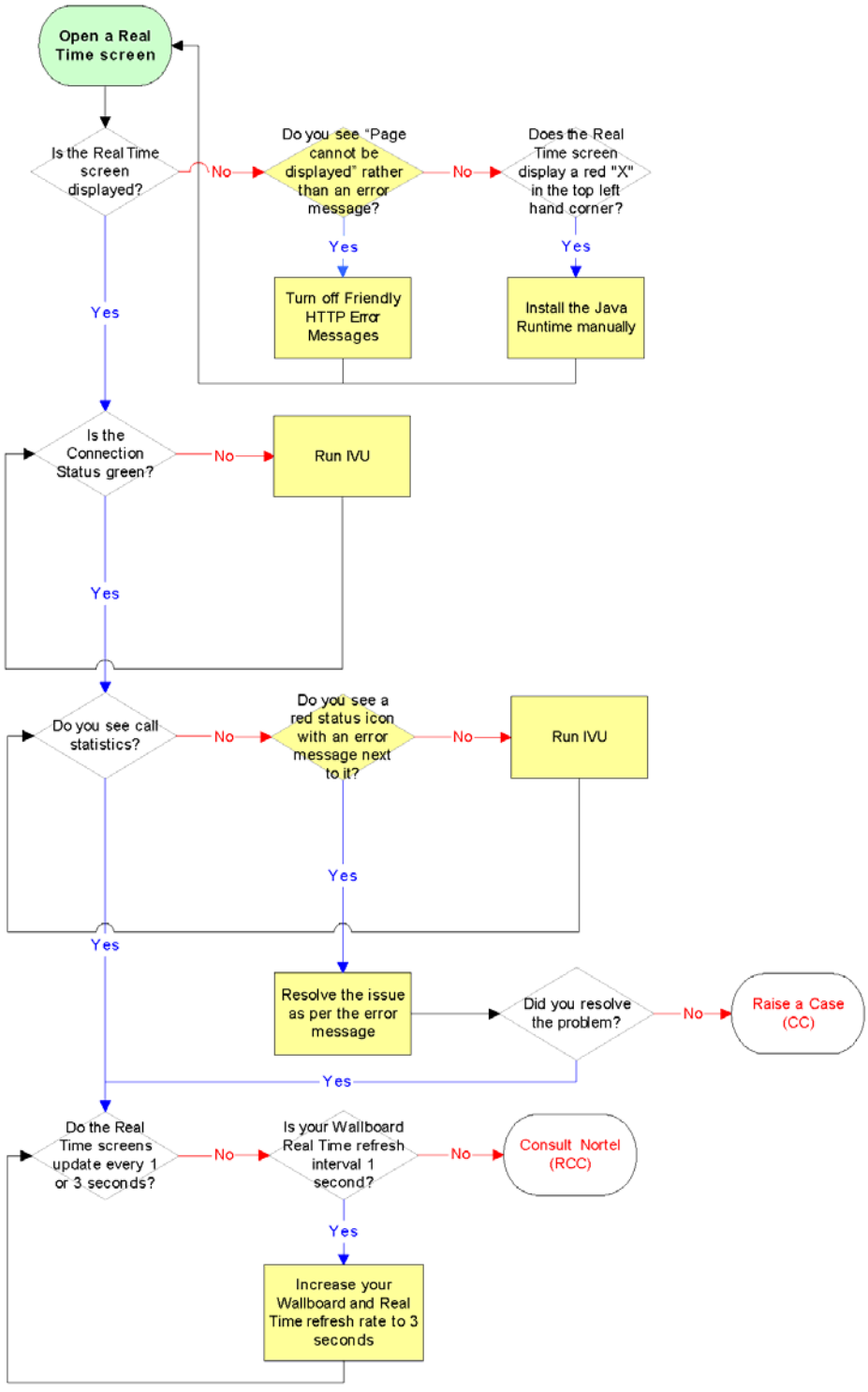
Turn off Friendly HTTP Error Messages

To see HTTP 500 error messages, Friendly HTTP Error Messages must be disabled in Internet Explorer. See Page cannot be displayed message on page 95.

Q) Were your questions answered by consulting the Reports Explained guide?

Detailed information on the Reports within Reporting for Contact Center can be found in the *Reporting for Contact Center - Reports Explained* (NN40010-626) guide (installed along with this guide on the Web Host PC). This guide details how to use the report viewer, the terms used within Reporting for Contact Center reports, what statistics and formulas are used to calculate each field in the reports (where applicable) and frequently asked questions.

Real Time Screens


Open a Real Time screen
Is the Real Time screen displayed?
No
Do you see "Page cannot be displayed" rather than an error message?
No
Does the Real Time screen display a red "X" in the top left hand corner?
Yes
Turn off Friendly HTTP Error Messages
Yes
Install the Java Runtime manually
Yes
Is the Connection Status green?
No
Run IVU
Yes
Do you see call statistics?
No
Do you see a red status icon with an error message next to it?
No
Run IVU
Yes
Yes
Resolve the issue as per the error message
Did you resolve the problem?
No
Raise a Case (CC)
Yes
Do the Real Time screens update every 1 or 3 seconds?
No
Is your Wallboard Real Time refresh interval 1 second?
No
Consult Nortel (RCC)
Yes
Increase your Wallboard and Real Time refresh rate to 3 seconds

Q) Do you see “Page cannot be displayed” rather than an error message?

To see HTTP 500 error messages by disabling friendly HTTP error messages in Internet Explorer see Page cannot be displayed message on page 95.

Turn off Friendly HTTP Error Messages

To see HTTP 500 error messages, Friendly HTTP Error Messages must be disabled in Internet Explorer. See Page cannot be displayed message on page 95.

Install the Java Runtime manually

To manually install Java Runtime Environment see Real Time screens are not displayed correctly on page 45.

Q) Is there a correct response from the CC using the CCRStest page?

See CCRS Test Page.

Q) Do you see a red status icon with an error message next to it?

Should an error message be returned from the Contact Center it will be displayed directly below the Connection Status indicator with a red status icon next to it.

Resolve the issue as per the error message

Note: For more detailed instructions on troubleshooting the following error messages refer to Error messages in Real Time screens on page 65.

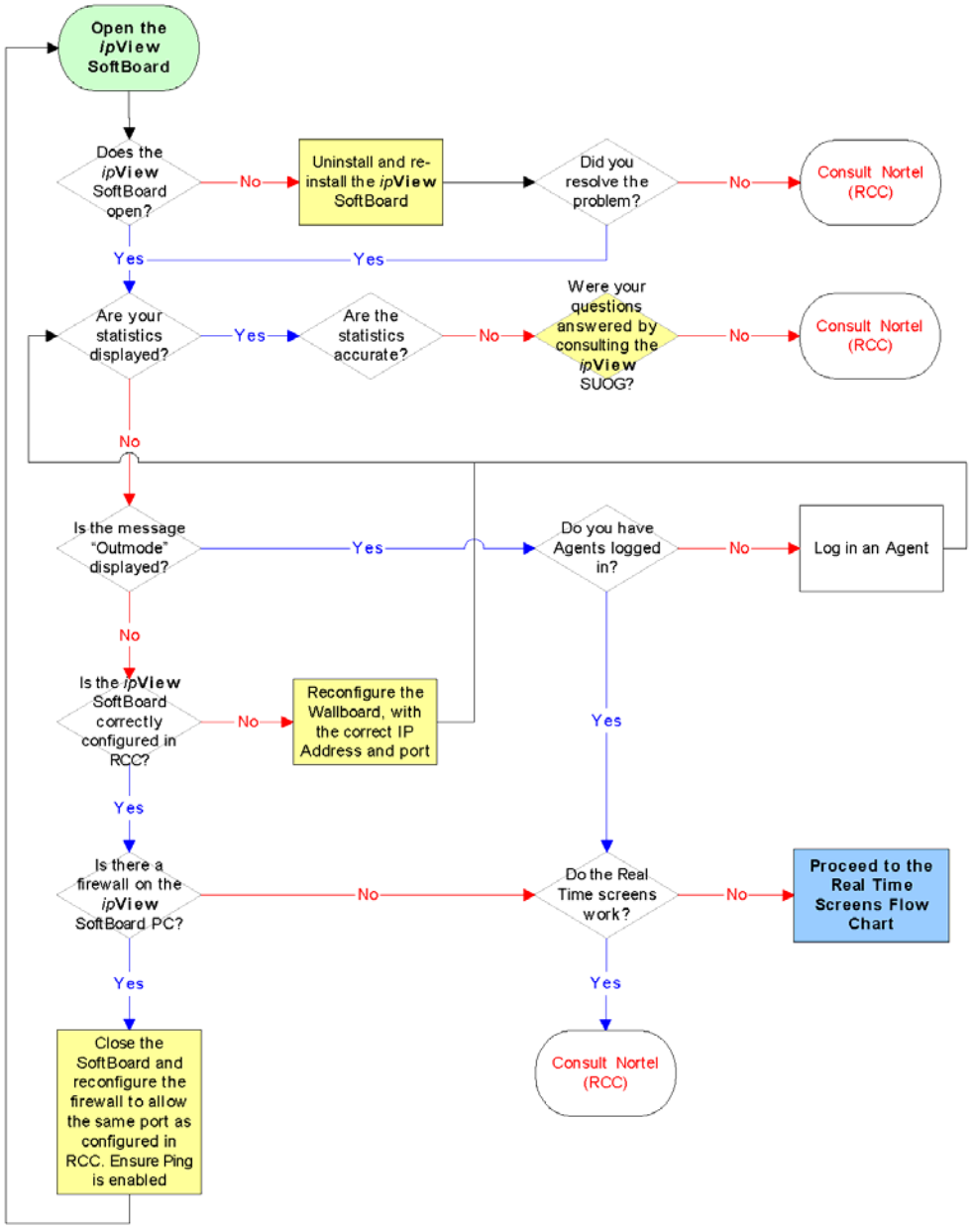
a. Invalid Request - The request from the client application is not valid, restart the RCC Launcher.
b. Voicemail Service Not Running - The Voicemail service is not running on the Contact Center. Restart the Voicemail service on the Contact Center through the Element Manager.
c. Invalid Password - The password used by the client application is not valid. Enter the correct password, use the CCRS test page to check if you are not sure.
d. No Key Code - The keycode used to turn on the CCRS data stream is not present. Enter the correct keycode.
e. No CC Data – No data is present in the CCRSAppServer database. Configure at least one skillset in CallPilot Manager.
f. No Contact Center Key Code - The keycode used to enable the Contact Center application is not present. Enter the correct keycode.
g. CCRS Disabled - The CCRS data stream is disabled. Enable the CCRSAppServer in the Element Manager.

h. Server Busy - The server is too busy to handle the request (too many simultaneous users). Check that other Reporting for Contact Center clients are not communicating with the same Contact Center, restart the RCC Launcher.
i. CDN Conflict – There is a Control Directory Number (CDN) conflict in the Skillset and CDN identified in the error message, this must be resolved in the CallPilot Manager interface.
j. Unknown Server Error – If none of the above, consult Nortel Support.

Increase your Wallboard and Real Time refresh rate to 3 seconds

a. Launch and log on to Reporting for Contact Center as an Administrator.
b. Click on the **Contact Center Connection** link.
c. Select 3 Seconds from the **Wallboard and Real Time Refresh Interval**.
d. Click **Submit**.

Software Wallboard



Uninstall and re-install the *ip*View SoftBoard

Refer to the *ipView Software Wallboard Setup and Operation Guide* (NN40010-500).

Reconfigure the Wallboard, with the correct IP Address and port.

Refer to the *ipView Software Wallboard Setup and Operation Guide* (NN40010-500).

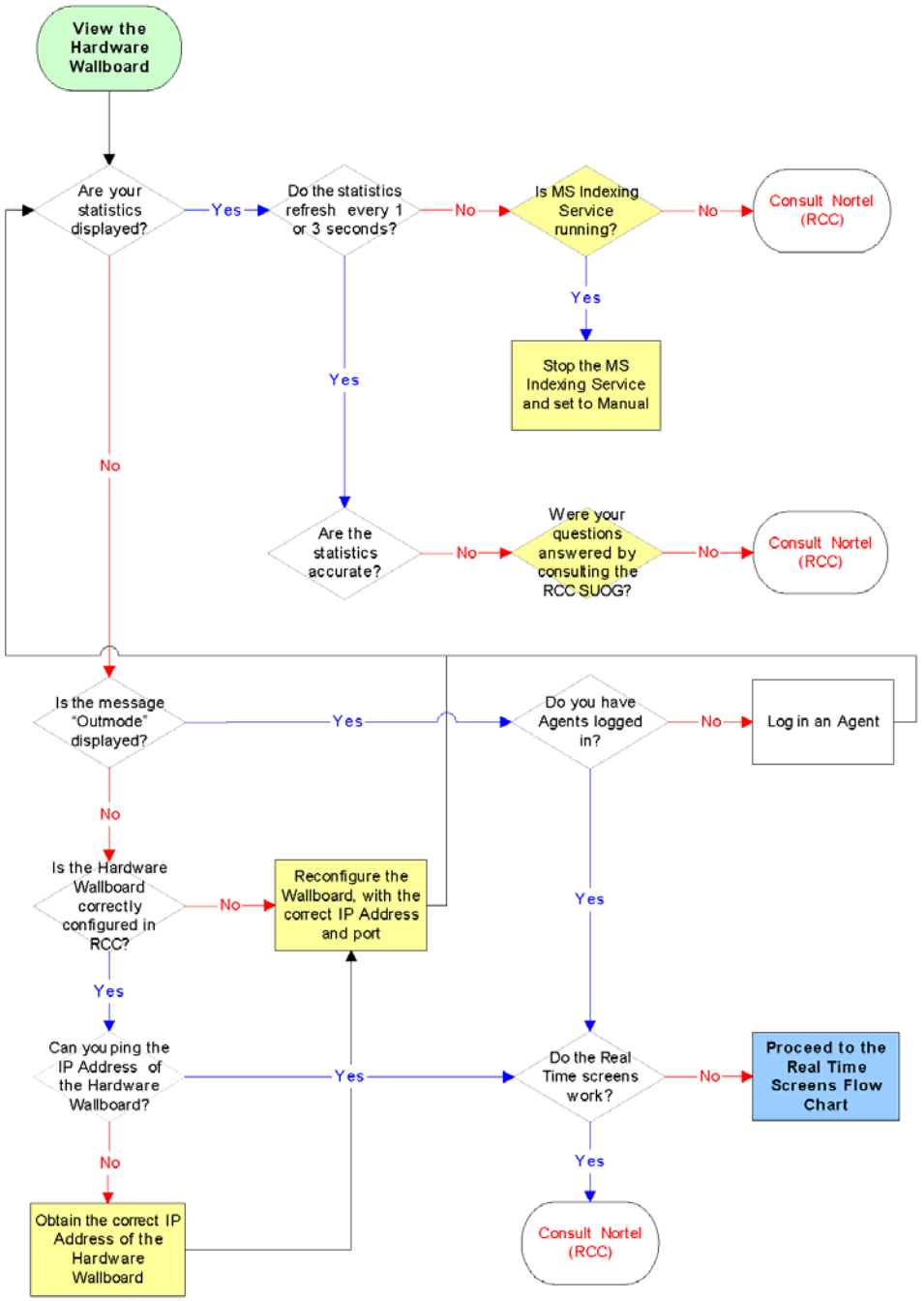
Were your questions answered by consulting the *ip*View SUOG?

Detailed information on the *ip***View** SoftBoard can be found in the *ipView Software Wallboard Setup and Operation Guide* (NN40010-500).

Close the SoftBoard and reconfigure the firewall to allow the same port as configured in RCC.

Refer to Ports and .exe files used by Reporting for Contact Center on page 51 for Reporting for Contact Center port numbers and executable files.

Hardware Wallboard



Is MS Indexing Service running?

On the Web Host PC, or the PC that the hardware wallboard is directly connected to, check by one of the following options:

Option 1

1. Open the Windows Task Manager by pressing **Ctrl+Alt+Delete**.
2. Click **Task Manager**.
3. Click the **Processes** tab.
4. Search for the process **cidaemon.exe**. If this is running, MS Indexing Service will be running on the PC.

Option 2

1. From the Start menu, click on **Settings > Control Panel > Administrative Tools > Services.**
2. Locate the service **Indexing Service**.
3. If the Status is set to **Started**, MS Indexing Service will be running on the PC.

Stop the MS Indexing Service and set to Manual

Refer to Pause in parameter count on the Hardware Wallboard on page 76.

Reconfigure the Wallboard, with the correct IP Address and port

Refer to the *ipView Software Wallboard Setup and Operation Guide* (NN40010-500).

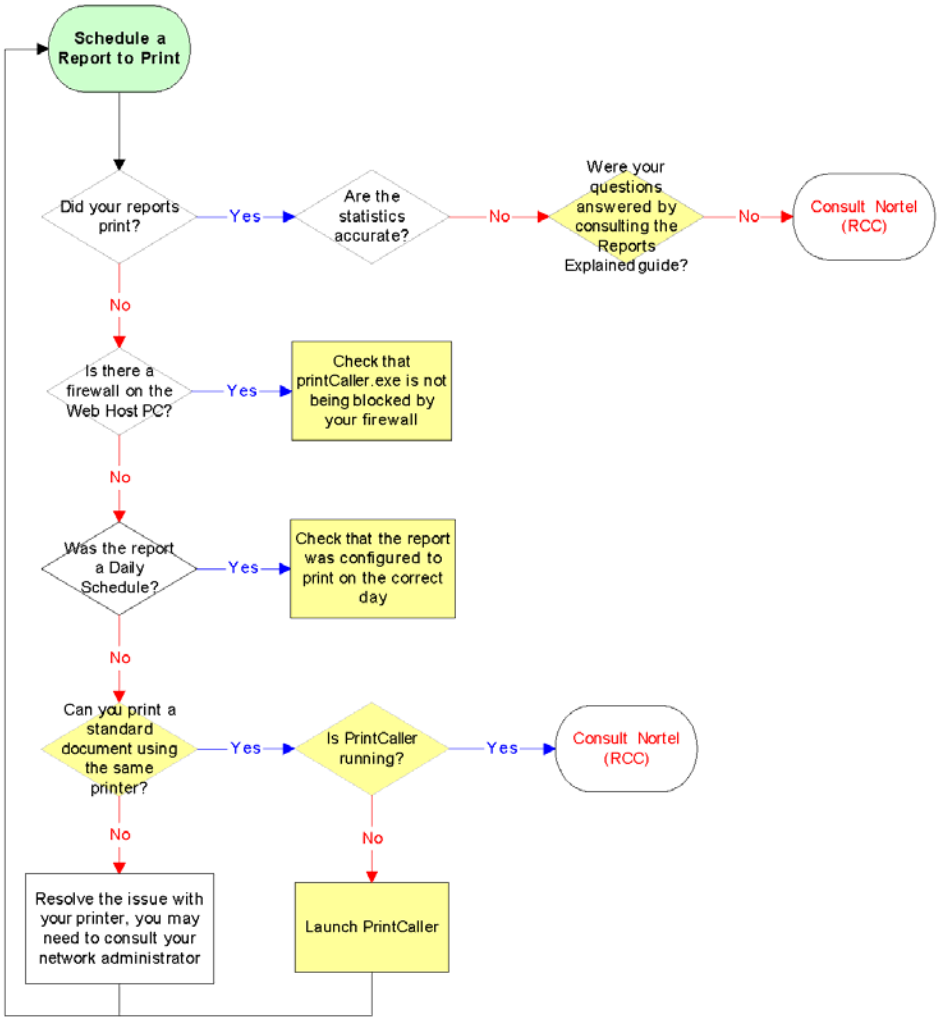
Were your questions answered by consulting the RCC SUOG?

Detailed information on the configuration and the statistics displayed on the hardware wallboard can be found in the *Reporting for Contact Center Setup and Operations Guide* (installed along with this guide on the Web Host PC).

Obtain the correct IP Address of the Hardware Wallboard

Refer to IP Address of the Hardware Wallboard on page 76 for instructions on obtaining the IP Address of the hardware wallboard.

Print Schedules


Schedule a Report to Print
Did your reports print?
Yes
Are the statistics accurate?
No
Were your questions answered by consulting the Reports Explained guide?
No
Consult Nortel (RCC)
No
Is there a firewall on the Web Host PC?
Yes
Check that printCaller.exe is not being blocked by your firewall
No
Was the report a Daily Schedule?
Yes
Check that the report was configured to print on the correct day
No
Can you print a standard document using the same printer?
Yes
Is PrintCaller running?
Yes
Consult Nortel (RCC)
No
Resolve the issue with your printer, you may need to consult your network administrator
No
Launch PrintCaller

Check that printCaller.exe is not being blocked by your firewall

Refer to the .exe files used by Reporting for Contact Center section on page 51.

Q) Were your questions answered by consulting the Reports Explained guide?

Detailed information on the Reports within Reporting for Contact Center can be found in the *Reporting for Contact Center – Reports Explained* (NN40010-626) guide (installed along with this guide on the Web Host PC). This guide details how to use the report viewer, the terms used within Reporting for Contact Center reports, what statistics and formulas are used to calculate each field in the reports (where applicable) and frequently asked questions.

Check that the report was configured to print on the correct day

Refer to the Check the print schedule section on page 78.

Can you print a standard document using the same printer?

Refer to the Check the printer section on page 78.

Q) Is Print Caller Service (PCS) running?

Refer to the Print Caller Service (PCS) section on page 78.

Launch Print Caller Service (PCS)

Refer to the sub-section Print Caller Service (PCS) on page 78.

Raising a Case: Information Gathering 5

This section details what to check for and the information to collate when problems arise in Reporting for Contact Center.

The following would be asked by, and should be provided to Nortel Support personnel when troubleshooting Reporting for Contact Center (try to complete as many questions as possible):

1. Is this a new installation? Yes / No

   If **Yes**, the following should be determined:

   - What was the previous software running on the equipment?
   - Was the issue present on that software or did the issue start after upgrade?

2. Detail a description of the issue:

   - What was the time and date of the first occurrence of the issue?
   - What is the frequency of the issue?
   - Were there any changes to the configuration or system before the issue occurred?
   - Is the issue reproducible? Yes / No

3. What are the steps or conditions to reproduce the issue?
4. If the issue is not reproducible, what were the exact actions taken before the issue occurred?
5. The name, version, as well as the Service Pack and any hot fixes, and language of the Operating System of the PC running Reporting for Contact Center? Also, whether the Operating System is an Original Equipment Model (OEM), or a Microsoft build?
6. Version of Reporting for Contact Center, and the language(s) of installation and logon User?
7. Version of VoiceMail (CallPilot)?
8. Version of Core (Telephony Version)?
9. Number of Agents?
10. Number of Skillsets?
11. Number of IP Wallboards?
12. Issues related to the reports, such as inaccuracies:

    - Is the issue related to one report, some reports, or all of the reports?
    - Provide a copy of the report(s) exported to PDF format:
      This can be done from the report viewer in Reporting for Contact Center.

      Note: The Agent Audit report (the recommended report period being less than 24 hours) is a good test for checking issues with Reporting for Contact Center.
    - Provide a detailed description of what the issue is with the report(s).

- Provide the date and time of the issue with the report. For example, the exact date and time when the report gave inaccurate, or did not give any data.
- Detail how you expect the report(s) to appear.

13. Issues related to Reporting for Contact Center functionality, that is, it does not work as expected:
    - Provide a detailed description of what the issue is.
    - Capture screen shots of any errors.
    - Detail how you expect Reporting for Contact Center to work.
14. Issues relating to SoftBoards:

    In addition to the Reporting for Contact Center logging, see step 16, include the logging for the problematic SoftBoard by echoing it to 127.0.0.1 for at least an hour and collecting the .log file in the install location of the SoftBoard.
15. The Archlog of the Contact Center should be attached to the Customer Service Request (CSR), with details regarding the time and date of the problem and log stamping.

    BCM logs are stamped by pressing **Feature 9*9** from a display telephone – this displays a stamp number which should be provided to Nortel for locating the exact point a problem occurred in the logs. Refer to the *BCM 4.0 Administration Guide* (N0060598) and *BCM50 Administration Guide* (N0016868 01), for instructions on retrieving log files from the Contact Center.

    Note: Before retrieving logs, ensure that the Web Host PC system time is synchronized with that of the Contact Center.
16. Copy of Reporting for Contact Center logs:
    - The log file location is specified by the Administrator in Reporting for Contact Center. Click **Admin** > **Maintenance** > **Logging**. The path is given under **Log files location**.
        a. Collect the latest logs by clicking the **Archive Logs** button, then click the **Download Logs** button next to the log file archive that you wish to download.
17. Copy of the Reporting for Contact Center database for Microsoft SQL Server:
    a. From the Start menu, click on **Settings** > **Control Panel** > **Administrative Tools** > **Services.**
    b. Click on **RCC Launcher**. Click the **Extended** tab and click on **Stop** to stop the RCC Launcher Server.
    c. Click on **SQL Server (SQLExpress)** service, and click on **Stop** from the Extended window to stop the Microsoft SQL Server 2005 service.
    d. Browse to the \Program Files\Microsoft SQL Server\MSSQL.1\MSSQL\Data folder.
    e. Copy and Paste the CCRDB.mdf and CCRDB_log.ldf to a different location, i.e. the desktop.

f. Restart the **SQL Server (SQLExpress)** service.

g. Restart the RCC Launcher service.

18. To provide Nortel Support remote access to the user's PC to resolve the issue, the user should test the following site: http://nortelsupport.webex.com. This Web site is used for real-time Nortel Customer Support sessions, called Remote Support, allowing full control of the RCC Web Host PC's desktop.

    If the user does not have Internet access, attempt to resolve this, with the customer's network team. Providing you can access this link, a Nortel engineer will provide a session number. You will need to 'join a session' and complete the details.

    For high security sites, please be aware that joining a support session includes a "two way handshake". You can join a session; however, you still need to accept the Nortel engineer to join. Ideally discuss this with the Nortel engineer, when joining the session. You will also need to allow FTP, should the Nortel engineer wish to FTP files either from or to the RCC Web Host PC.

    Where access to http://nortelsupport.webex.com is not available, this may delay problem resolution.

Web Host PC Troubleshooting 6

This section provides information and details possible problems that occur on the Web Host PC and how to resolve those issues. The Web Host PC is defined as the PC where Reporting for Contact Center was installed.

This section is further divided into the following subsections:

- Microsoft SQL Server 2005
- Internet Information Services
- Java Runtime Environment
- Firewalls
- Anti Virus
- Proxy Server
- Historical Reports
- Wallboards
- Printing report
- Miscellaneous

Microsoft SQL Server 2005

Overview and installation

The historical report information is stored in a standard SQL Server database on the Web Host PC. If Users have reporting requirements that are not available through Nortel Reporting for Contact Center, they can analyze the data using third-party reporting packages.

Reporting for Contact Center installs Microsoft SQL Server 2005 which maintains the SQL Server database.

Version compatibility

Microsoft SQL Server 2005 is used for administrating and maintaining historical data for Reporting for Contact Center for BCM50 3.0

The user does not need to uninstall this version of Microsoft SQL Server 2005 after upgrading a previous version of Reporting for Contact Center. If required, the Reporting for Contact Center database will be modified during the installation of Reporting for Contact Center. There is no loss of statistical data, but new data, tables, columns, and indexes will be added to it, where necessary.

Uninstalling and re-installing

The Microsoft SQL Server will need to be removed and re-installed when required, for instance, if installation of Reporting for Contact Center did not complete 100%, see the Installing Reporting for Contact Center flow chart on page 16. To remove Microsoft SQL Server from the Web Host PC, perform the following:

1. Click on **Start > Settings > Control Panel > Add or Remove Programs > Microsoft SQL Server 2005**.
2. Click the **Remove** install button.

After this has been done run the Install Verification Utility (IVU) from the desktop.

Backup and Restore the RCC Database

1. On the Web Host PC download and install the SQL Server Management Studio from the following location:

   http://msdn.microsoft.com/vstudio/express/sql/default.aspx

2. After the installation is complete open SQL Server Management Studio Express by clicking on **Start > All Programs > Microsoft SQL Server 2005 > SQL Server Management Studio Express**.
3. From the Connect to Server dialog box, connect to the local SQL Server with the host name of the current PC and authentication details, see Figure 1: SQL Server Management Studio login dialog box, as follows:
    a. Server name is **[PC name]\SQLEXPRESS**.
    b. From the Authentication drop down box select **SQL Server Authentication**.
    c. Enter the user authentication details where Login is **backupuser** and Password is **rccbackup!** (including the exclamation mark).

Figure 1: SQL Server Management Studio login dialog box

Note: During the backup and restore operations of the database, do not access the Reporting for Contact Center Web pages. This also applies to any Client PC connected to the Web Host PC.

Backup

1. From the left of the Microsoft SQL Server Management Studio Express window, in the Object Explorer pane, expand **[PC name]\SQLEXPRESS > DATABASES**. See Figure 2: Navigation tree view of databases.

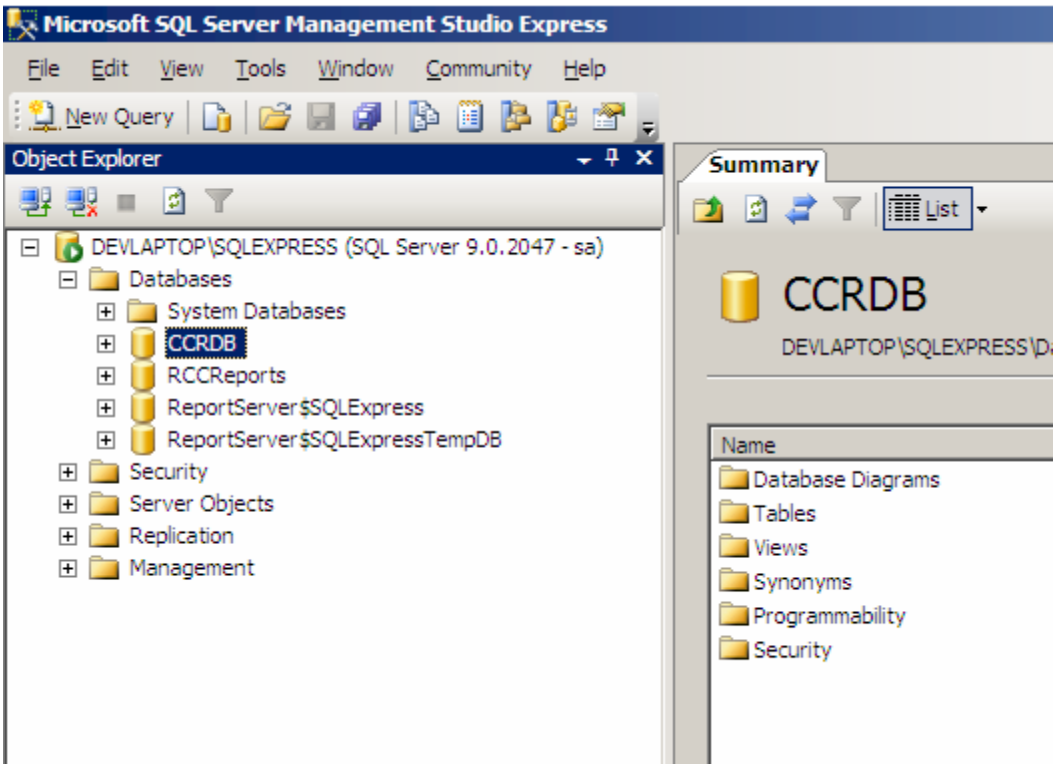


Figure 2: Navigation tree view of databases

2. Right click on **CCRDB** and select **Tasks > Backup**.
3. The Back Up Database – CCRDB dialog box will open, as shown in Figure 3: Back Up Database control dialog box.
4. Click **OK** to back up the CCRDB database.

   This will take a few minutes depending on the size of your database.

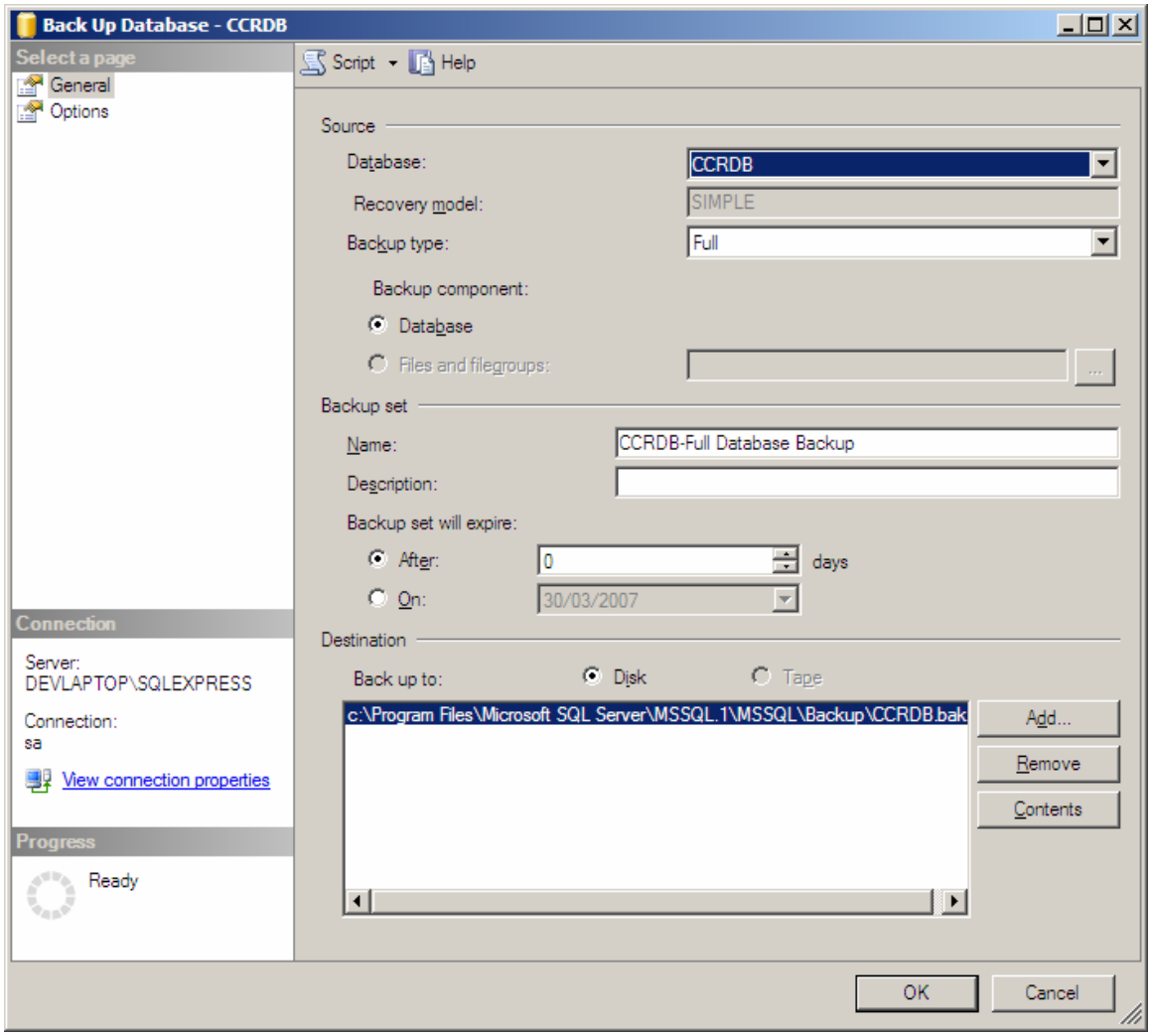


Figure 3: Back Up Database control dialog box

Note: Your CCRDB database backup file will be saved to the default location: C:\Program Files\Microsoft SQL Server\MSSQL.1\MSSQL\Backup.

Do not move the backup file from the default location. You may copy over the back up file to a network location where files are automatically backed up to a storage media.

Contact your network administrator for advice on your company prodecures for backing up and restoring the database.

Restore

Before restoring the CCRDB database, stop RCC processes and the SQL Server service as follows:

1. Press **Ctrl+Alt+Delete** and click **Task Manager** to open the Windows Task Manager dialog box.
2. Select the **Processes** tab to view all the processes running on the Web Host PC.

3. Select the process **RCCMonitor.exe** and click **End Process** to end this process.
4. Select the process **PrintCaller.exe** and click **End Process** to end this process.
5. Close the Windows Task Manager window.
6. Click on **Start > All Programs > Microsoft SQL Server 2005 > Configuration Tools > SQL Server Configuration Manager**.
7. Select **SQL Server 2005 Services** from the left pane.
8. Select **SQL Server (SQLEXPRESS)** from the right hand pane.
9. From the toolbar click on **Stop Service** icon.
10. After the service has stopped, from the toolbar click **Start Service** to restart the service.

Perform the following steps to restore the CCRDB database:

1. From the left of the Microsoft SQL Server Management Studio Express window, in the Object Explorer pane, expand **[PC name]\SQLEXPRESS > DATABASES**. See Figure 2: Navigation tree view of databases.
2. Right click on **CCRDB** and select **Tasks > Restore > Database**.
3. The Restore Database – CCRDB dialog box will open, as shown in Figure 4: Restore Database control dialog box.

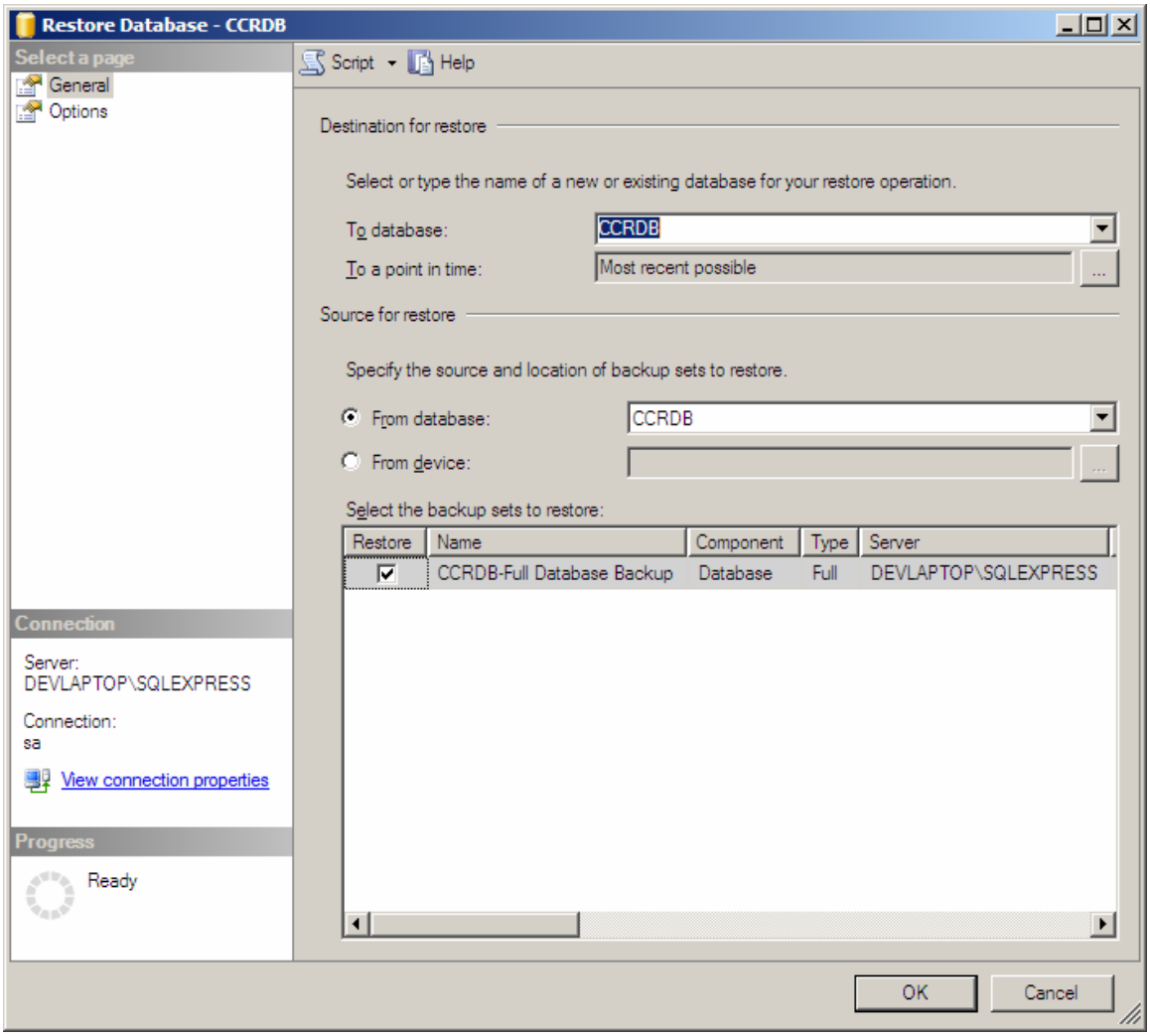


Figure 4: Restore Database control dialog box

4. The latest backup file saved in the default location will be displayed. Click **OK** to restore the CCRDB database with the latest saved database.

   To restore the CCRDB database from a backup saved at a certain point in time, under Destination for restore select the ellipsis button to the right of **To a point in time**. The Point in time restore dialog box will open.

5. Select **A specific date and time** and select the point in time from the **Date** and **Time** boxes of the backup database set to restore from. See Figure 5: Point in time restore dialog box.

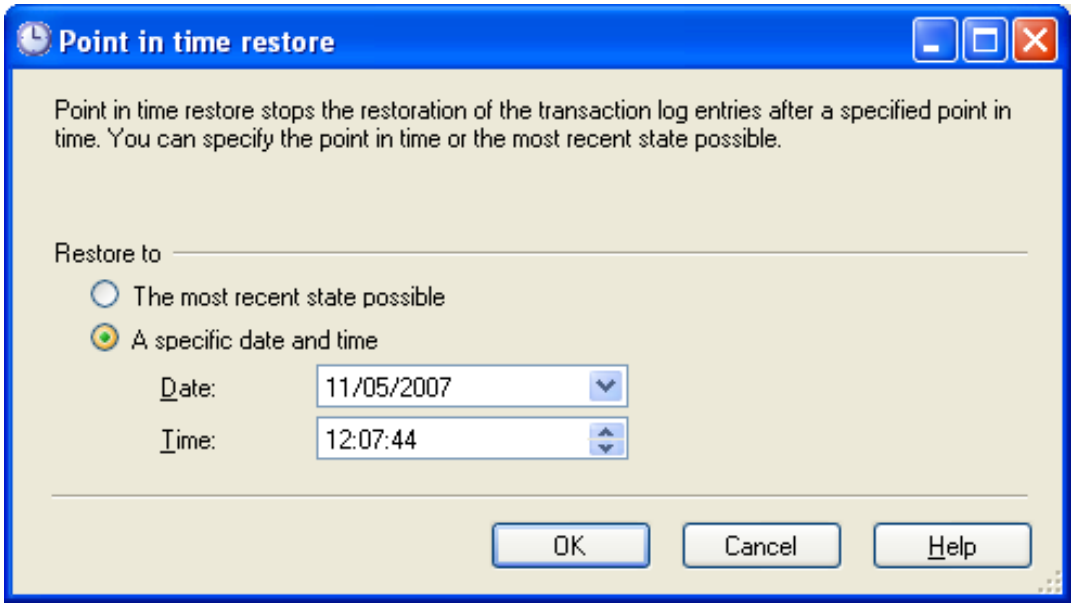

Point in time restore
Point in time restore stops the restoration of the transaction log entries after a specified point in time. You can specify the point in time or the most recent state possible.
Restore to
The most recent state possible
A specific date and time
Date:
11/05/2007
Time:
12:07:44
OK
Cancel
Help

Figure 5: Point in time restore dialog box

6. Click **OK**.
7. The specified point in time backup file will be displayed. Click **OK** to restore the CCRDB database with this database.

After the CCRDB database backup is restored, start the RCC Launcher service and start RCC Monitor as follows:

1. Click on **Start > Settings > Control Panel > Administrative Tools > Services**.
2. From the Extended window pane select **RCC Launcher**.
3. Right-click on **RCC Launcher** and select **Start** to restart the RCC Launcher service.

To start RCC Monitor, perform the following:

1. Click on **Start > All Programs > Startup > RCC Monitor**.
2. The RCC Monitor splash screen will be displayed.

All users are now allowed to access the RCC Web pages.

Database Corruption

Microsoft SQL Server 2005 maintains itself and automatically repairs any corruptions. However, if a corruption is detected run the Install Verification Utility (IVU) to automatically check this for you by clicking **Start > All Programs > Nortel > Reporting for Conatact Center > RCC Install Verification Utility**.

Internet Information Services

IIS overview and installation

Microsoft Internet Information Services (IIS) is a set of Internet-based services for servers using Microsoft Windows. IIS provides Web application infrastructure for Reporting for Contact Center. Ensure that the full suite of Microsoft Internet Information Services is installed and operational on the Web Host PC, and that the Default Web Site is enabled. To install Microsoft Internet Information Services and check the default Web site, see *Reporting for Contact Center Setup and Operations Guide* (NN40040-303).

IIS version compatibility

The following table, Table 1: IIS version compatibility with Microsoft Windows Operating Systems, is a list of different versions of IIS and the Microsoft Windows Operating System compatibility:

Operating System	IIS Version
Windows 2000	IIS 5.0
Windows XP Professional	IIS 5.1
Windows Server 2003 and Windows XP Professional	IIS 6.0
Windows Vista	IIS 7.0

Table 1: IIS version compatibility with Microsoft Windows Operating Systems

Recreating Virtual Directories

Reporting for Contact Center uses virtual folders which are created during an installation of Reporting for Contact Center on the Web Host PC. These are:

- rcc
- java
- rccx
- reportservice$sqlexpress
- reports$sqlexpress

Virtual folders not created in Internet Information Services

Run the Install Verification Utility (IVU) from the desktop and it will check and, if necessary, re-create any virtual directories that are missing.

Restarting the IIS Service

Perform the following steps to restart the IIS service:

1. Click on **Start > Settings > Control Panel > Administrative Tools > Services**.

2. From the Extended window pane select **IIS Admin** (or **IIS Admin Service**).

3. Click on **Start** to the left of the **Extended** window, or right-click on **IIS Admin** and select **Start** to restart the IIS Service.

4. Ensure that the World Wide Web Publishing service is also running by repeating steps 1 to 3, replacing **IIS Admin** service with **World Wide Web Publishing Service**.

5. Close all windows.

Java Runtime Environment

Java overview and installation

PCs that have network access to the Web Host PC, known as Client PCs, can access Reporting for Contact Center through Web pages in Internet Explorer browser sessions. Multiple users can, therefore, use Nortel Reporting for Contact Center without having any software other than Internet Explorer installed on their PCs.

> **Note:** The Java Runtime Environment (JRE), if required, and the ActiveX Report Viewer are automatically downloaded to the Client PC the first time they are required.

Java version compatibility

Only one JRE version can live during a browser's session. In other words, once a version of the JRE is loaded in a browser's process, you cannot switch to run an applet in a different version of the JRE. You can only switch to a different JRE version at the start of the browser process.

It is essential that you have Java(TM) SE Runtime Environment 6 installed on your PC for correct operation of Reporting for Contact Center. See the following section Real Time screens are not displayed correctly on page 45.

> **Note:** At the date of release of this guide Java SE Runtime Environment v. 1.6.0_[release version] was the latest JRE version available on the market. Any future JRE version higher than this, for example, JRE 1.7.0_[release version] probably will be backward compatible with Reporting for Contact Center.

Real Time screens are not displayed correctly

If you have multiple versions of JRE installed on your PC and the Real Time screens are not being displayed correctly check that Internet Explorer is using JRE version 1.6.0 for applets, or higher, by the following:

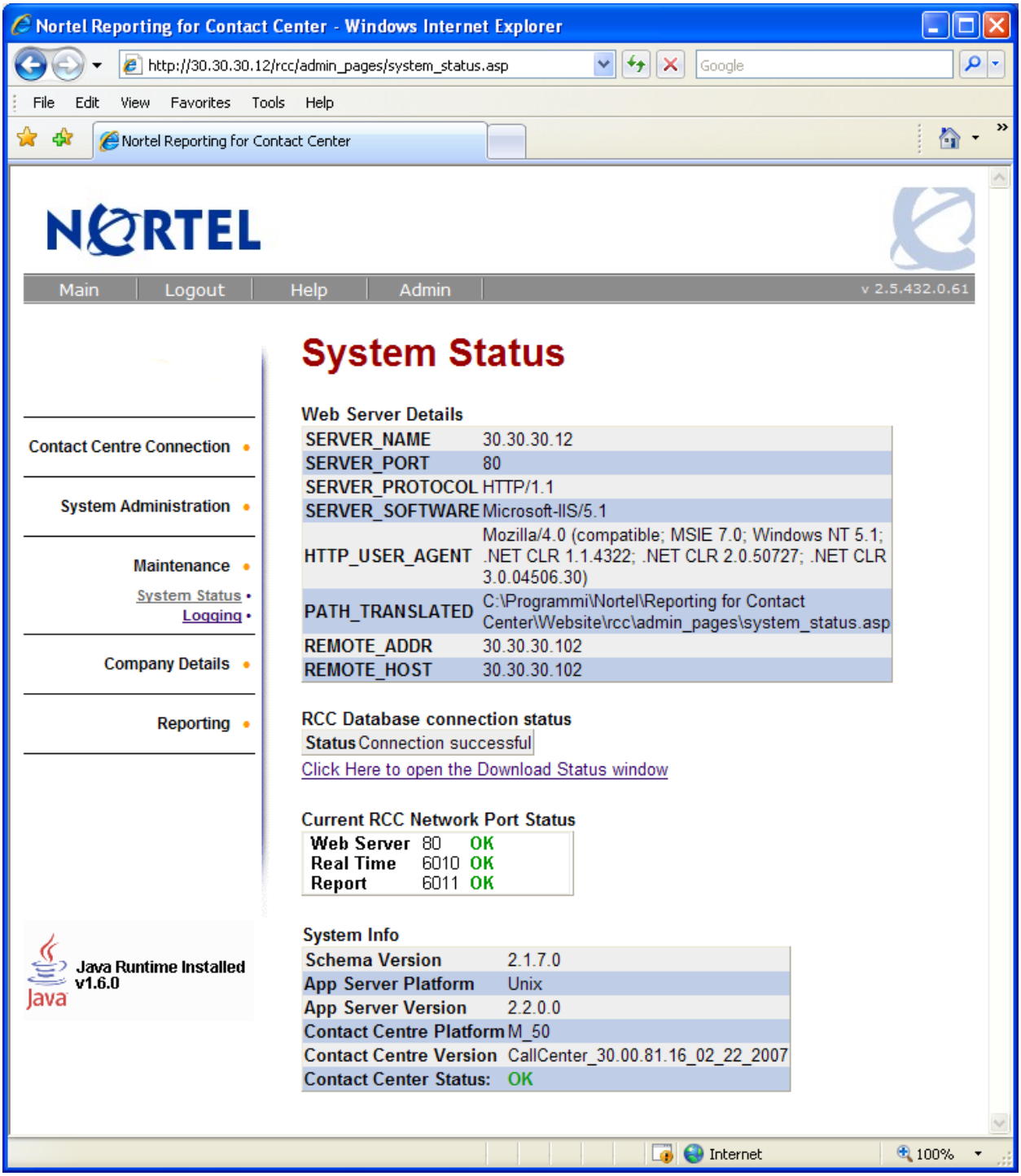


Figure 6: Page cannot be found error message

1. Click **Start**, then right-click the **Internet Explorer** icon, and select **Internet Properties**. See Figure 7: Internet Properties Dialog Box.

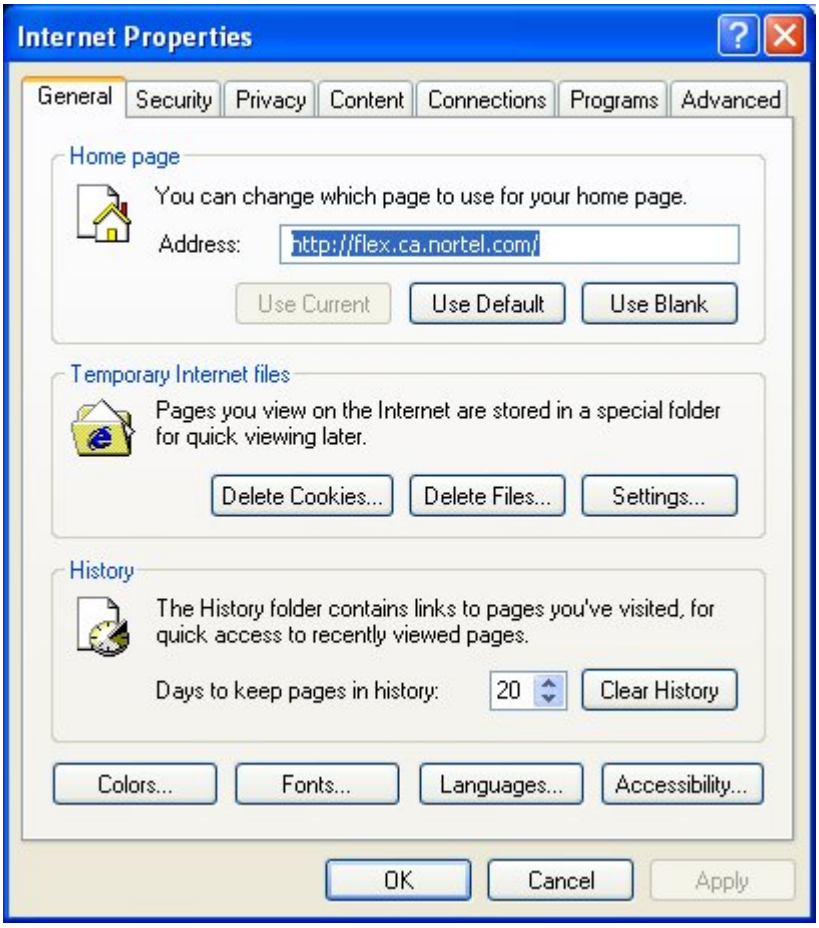


Figure 7: Internet Properties Dialog Box

Note: If you do not see the dialog box shown in Figure 7: Internet Properties Dialog Box, you have clicked a shortcut to Internet Explorer. You must click the Internet Explorer icon in the Start menu.

2. Click on the **Advanced** tab and scroll down to Java (Sun) and select the **Use JRE 1.6.0_[version] for <applet>** check box. See Figure 8: Advanced window for JRE 1.6.0 for <applet> selection.

   Click **Apply** and click **OK** to close the Internet Properties dialog box.

   If the **Use JRE 1.6.0[_version] for <applet>** option is not available, JRE version 1.6.0 must be installed. Go to step 6.

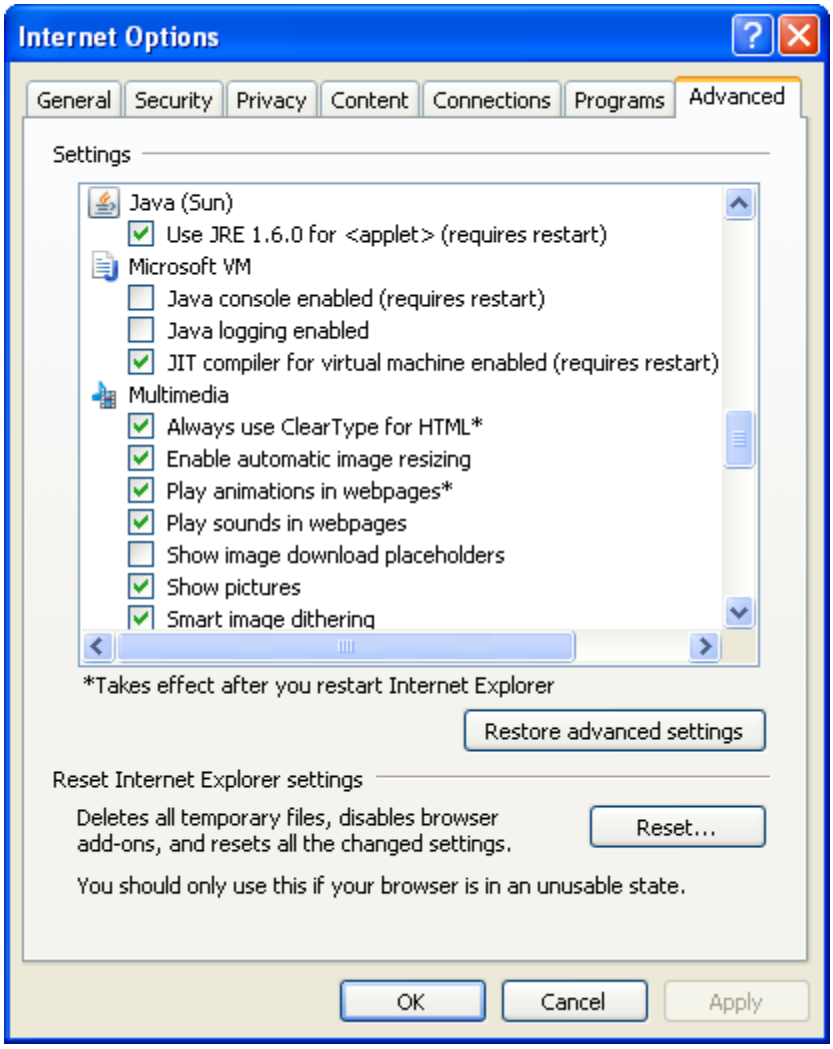


Figure 8: Advanced window for JRE 1.6.0 for <applet> selection

3. If the Real Time screens are still being displayed incorrectly, uninstall JRE version 1.6.0 by selecting from the Window taskbar **Start** > **Settings** and then click **Control Panel**. The **Control Panel** window appears.
4. Double-click the **Add or Remove Programs** icon. The Add or Remove Programs dialog box appears.
5. Under Java(TM) SE Runtime Environment 6 click **Remove**. Click **Yes** to confirm uninstalling the program.
6. Re-install Java Runtime Environment 6 on the Web Host PC by opening C:\Program Files\Nortel\Reporting for Contact Center\Java. Double-click on the file **jre-6-windows-i586.exe** to install the Java Runtime Environment.

When JRE 1.6.0 is installed on the PC you should be able to view Real Time screens correctly.

Java Cache

Real Time screens are displayed but no data is seen (clearing the Java Cache)

If you can launch the Real Time screens, but once loaded you see no data and the connection status is red you may need to clear the Java Cache. This is most prevalent when having performed an upgrade, if you have not performed an upgrade, that is, it is a fresh install this will not be applicable.

To clear your Java Cache open up the Control Panel window and double-click on the **Java** icon.

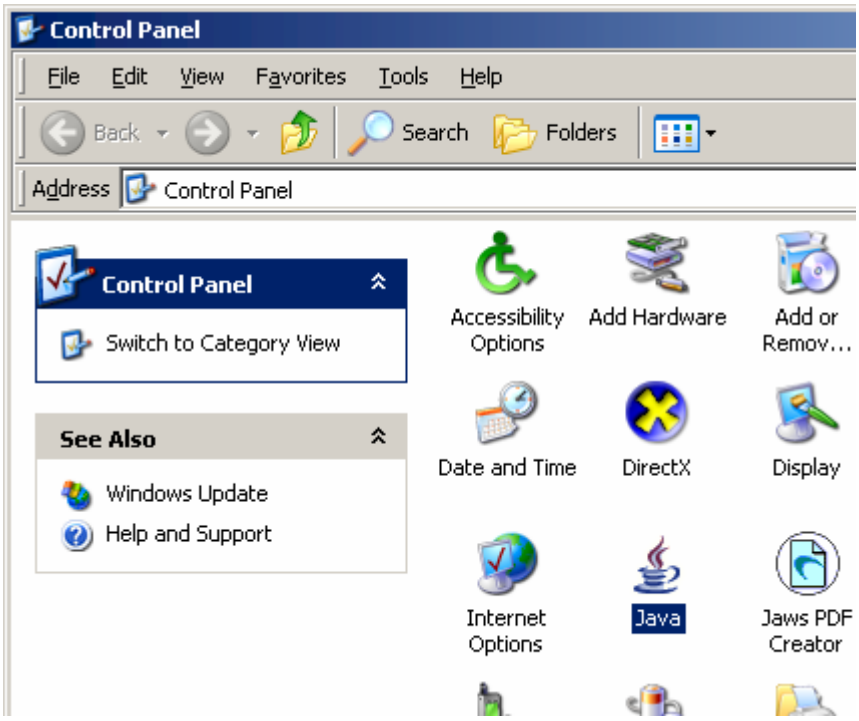


Figure 9: Clearing the Java Cache (Control Panel)

This will open the Java Control Panel window. From the **General** tab, under **Temporary Internet Files** click **Delete Files**, as shown in Figure 10: Clearing the Java Cache (Java Control Panel).

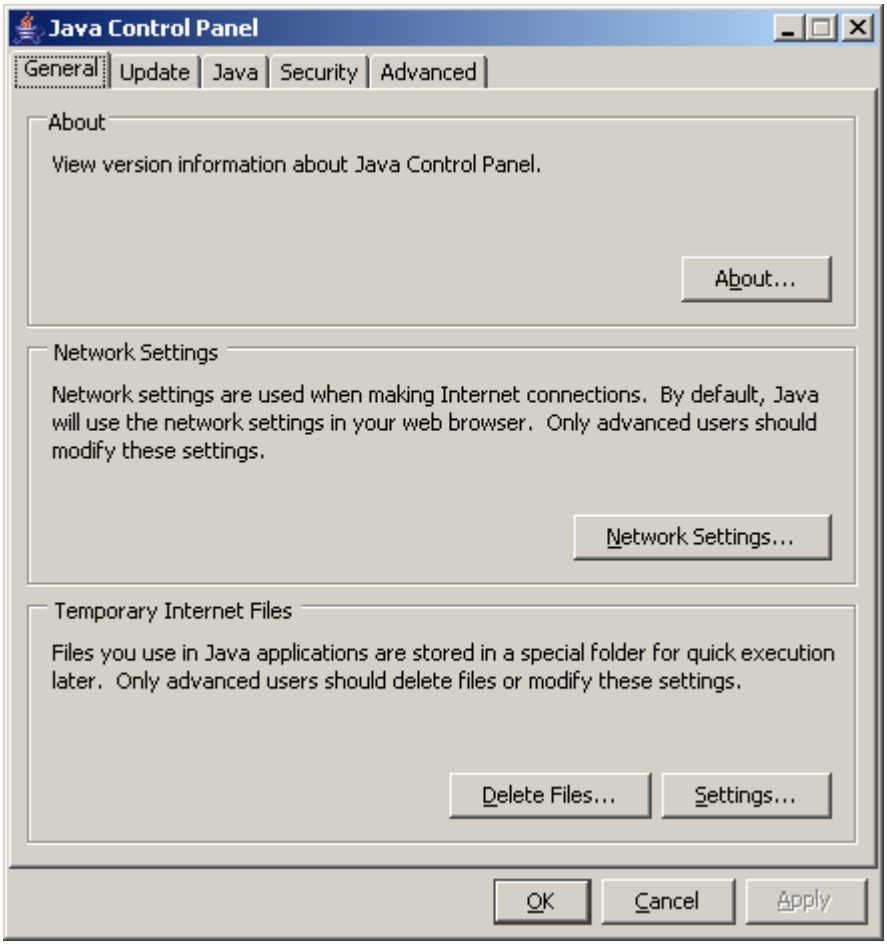

Java Control Panel
General
Update
Java
Security
Advanced
About
View version information about Java Control Panel.
About...
Network Settings
Network settings are used when making Internet connections. By default, Java will use the network settings in your web browser. Only advanced users should modify these settings.
Network Settings...
Temporary Internet Files
Files you use in Java applications are stored in a special folder for quick execution later. Only advanced users should delete files or modify these settings.
Delete Files...
Settings...
OK
Cancel
Apply

Figure 10: Clearing the Java Cache (Java Control Panel)

The Delete Temporary Files prompt window will open asking to confirm temporary internet files deletion, as shown in Figure 11: Clearing the Java Cache (Prompt). Click **OK**.

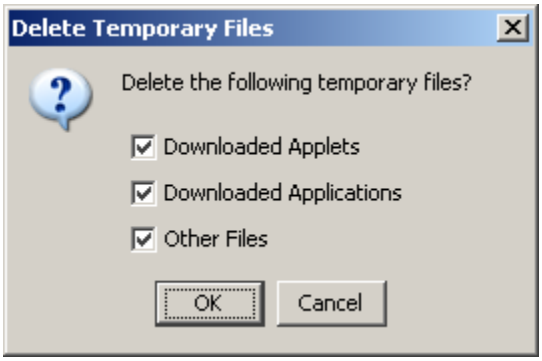


Figure 11: Clearing the Java Cache (Prompt)

Firewalls

Ports and .exe files used by Reporting for Contact Center

Port Numbers used by Reporting for Contact Center

The following is a list of all the port numbers used by Reporting for Contact Center on the Web Host PC:

- Port 80 – this is the standard port used by the Web Server (the Web Host PC) for Internet Information Services.
- Port 8088 – used for the Reporting Server in the Business Communications Manager (BCM).
- Port 3500 – default value used by *ip***View** SoftBoard to listen for incoming data and to echo to other wallboards.

  Note: this value is configurable when setting up a wallboard and should be noted.
- Port 6010 – used by the Reporting for Contact Center Real Time (RCCRT) Server.
- Port 6011 – used by the Reporting for Contact Center Reporting (RCCRPT) Server.

.exe files used by Reporting for Contact Center

The following files are used by Reporting for Contact Center. Ensure that these files are not being blocked by your Personal Firewall:

- inetinfo.exe
- java.exe
- printCaller.exe
- RCC Install Verification Utility.exe
- RCC Monitor.exe
- rcclauncher.exe
- RSBackup.exe
- wallboarddriver.exe

Common Firewall Configuration

If any Internet security software is installed on your PC and a firewall is enabled, the user may encounter problems with the Contact Center connection whereby data can not be downloaded from the Contact Center to the database on the Web Host PC.

There are numerous firewall software packages available on the market. Only a selected few are mentioned here. It is essential that the user checks that files listed under the section .exe files used by Reporting for Contact Center (page 51), are not being blocked by your personal firewall.

Alternatively, third-party firewall logging can be enabled if the user is unsure whether or not it is blocking a port or application.

For further information about third-party software firewall settings, the user can refer to their firewall documentation, or consult their support personnel who manage the third-party firewall.

Uninstalling other firewalls

If the user encounters one or more of the following problems with their PC, more than one firewall may be installed on that PC:

- 'Blue screen' fatal errors, system freezing or sudden system reboots.
- Every access request is allowed for every application. Nothing is blocked.
- All application and system activities are blocked and the user is unable to connect to any site.
- The computer is unable to boot up.

These problems do not relate to a specific firewall but are common to all firewall software. It is important that only one firewall is installed on any one PC.

Windows Firewall

Launch the Install Verification Utility (IVU) from the desktop, any blocked ports in the Windows Firewall will be unlocked.

Norton Internet Security and Personal Firewall

If Norton Internet Security is installed on your PC and the Personal Firewall is enabled, the .exe files used by Reporting for Contact Center, see .exe files used by Reporting for Contact Center, may be blocked. This will prevent data to be downloaded from the Contact Center to the Web Host PC. Perform the following to allow data download from the Contact Center:

1. Open Norton Internet Security.
2. In the Personal Firewall settings page, **Block All (recommended)** or **Custom** will have been selected. Select **Permit All**.

The data download from the Contact Center should continue as normal.

Zone Alarm and Sophos

Zone Alarm and Sophos are names of companies that produce firewall software packages, as well as anti-virus software. Refer to Common Firewall Configuration on page 52 for advice on using these, as well as other third-party firewall software packages available on the market.

Anti Virus

Anti-Virus Software Slowing Down the File System

Some Anti-Virus software packages can significantly slow down the file system of the Web Host PC. This causes problems in the Real Time screens processing all of the XML data they receive from the Contact Center in time to refresh the Real Time data in a timely fashion.

Norton AntiVirus is one anti-virus package known to cause this symptom.

Norton AntiVirus software can enable the File System Realtime Protection on your computer that constantly monitors your computer activity for viruses. Disabling the File System Realtime Protection option in Norton AntiVirus will no longer restrict the operation of the Real Time screens. To do this, perform the following:

1. Right-click on the Norton AntiVirus icon in the system tray.
2. If there is a check mark next to **Enable File System Realtime Protection**, select the check mark to clear this option.

Anti-Virus packages vary in their implementations and in the granularity with which you can adjust their operational parameters. Typically the settings that you can adjust that make the Real Time screens appear sluggish and slow to update are the realtime file scanning settings.

> **Note:** *Realtime* in this context means that the Anti-Virus software scans the files on your computer constantly – it does not refer to the Reporting for Contact Center Real Time screens. It is just a coincidence that both applications have features that have the words *real time* in their title.

- Some Anti-Virus packages allow you to specify files with certain extensions which are to be ignored during virus scans. If this is possible with your Anti-Virus software, instruct it to ignore files with .log extensions.
- Some Anti-Virus packages allow you to specify locations on your hard disk which are to be ignored during virus scans. If this is possible with your Anti-Virus software, instruct it to ignore the location of the Reporting for Contact Center log files. By default this is \Program Files\Nortel\Reporting for Contact Center\Logs.
- Some Anti-Virus packages allow you to disable or fine tune the real time scanning action of files, and to isolate which types of file modification will trigger a re-scan (create a file, modify a file, write to a file, and so on).

Blank dialog boxes

McAfee 8.0i Anti-Virus software

If McAfee Viruscan Enterprise 8.0i is installed on your PC the user may see blank dialog boxes in Reporting for Contact Center.

If this happens please install the latest patches available from the McAfee Web site:

http://www.mcafee.com/

Proxy Server

A proxy server is a server that sits between the Reporting for Contact Center Web browser and the Contact Center. All requests from Reporting for Contact Center to the Contact Center will be intercepted by the proxy server. If the proxy server can not fulfill the requests, the requests are not forwarded to the Contact Center and an error message is returned to the web browser.

Proxy settings for BCM50 3.0

If a proxy server is enabled on a Web Host PC, ensure that the proxy server is not used when downloading call data from the Contact Center, see Disabling Proxy server. On a Client PC, the proxy server can be disabled or have an exception created for the Web Host PC IP Address to allow communication with the Web Host PC. See also, URL not allowed to be proxied error message on page 58.

Disabling Proxy server

Ensure any proxy server is disabled on the Web Host PC before downloading data from the Contact Center as follows:

1. On the **Tools** menu in Internet Explorer, click **Internet Options**, click the **Connections** tab, and then click **LAN Settings**. See Figure 12: Selecting LAN Settings from Connections window.

   The Local Area Network (LAN) Settings window will be displayed.

Figure 12: Selecting LAN Settings from Connections window

2. Under **Proxy server**, ensure the **Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections)** check box is cleared, as shown in Figure 13: Disabling proxy server in LAN Settings.

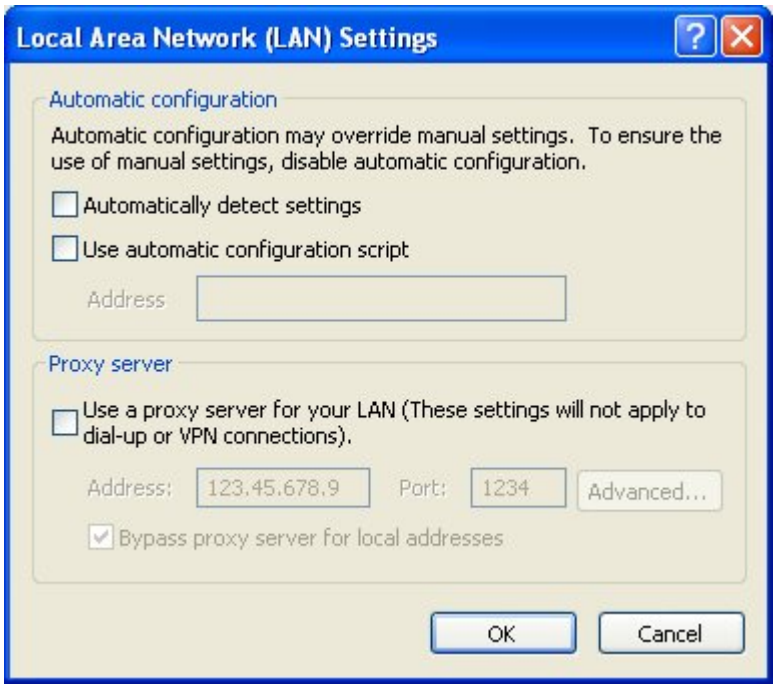


Figure 13: Disabling proxy server in LAN Settings

3. Click **OK** to close the **LAN Settings** dialog box.
4. Click **OK** again to close the **Internet Options** dialog box.

URL not allowed to be proxied error message

If a Client PC cannot access Reporting for Contact Center from an Internet Explorer browser window and gets a “This URL is not allowed to be proxied” error message, as in Figure 14: Proxy server denying access to RCC, the Proxy Server settings have to be modified.

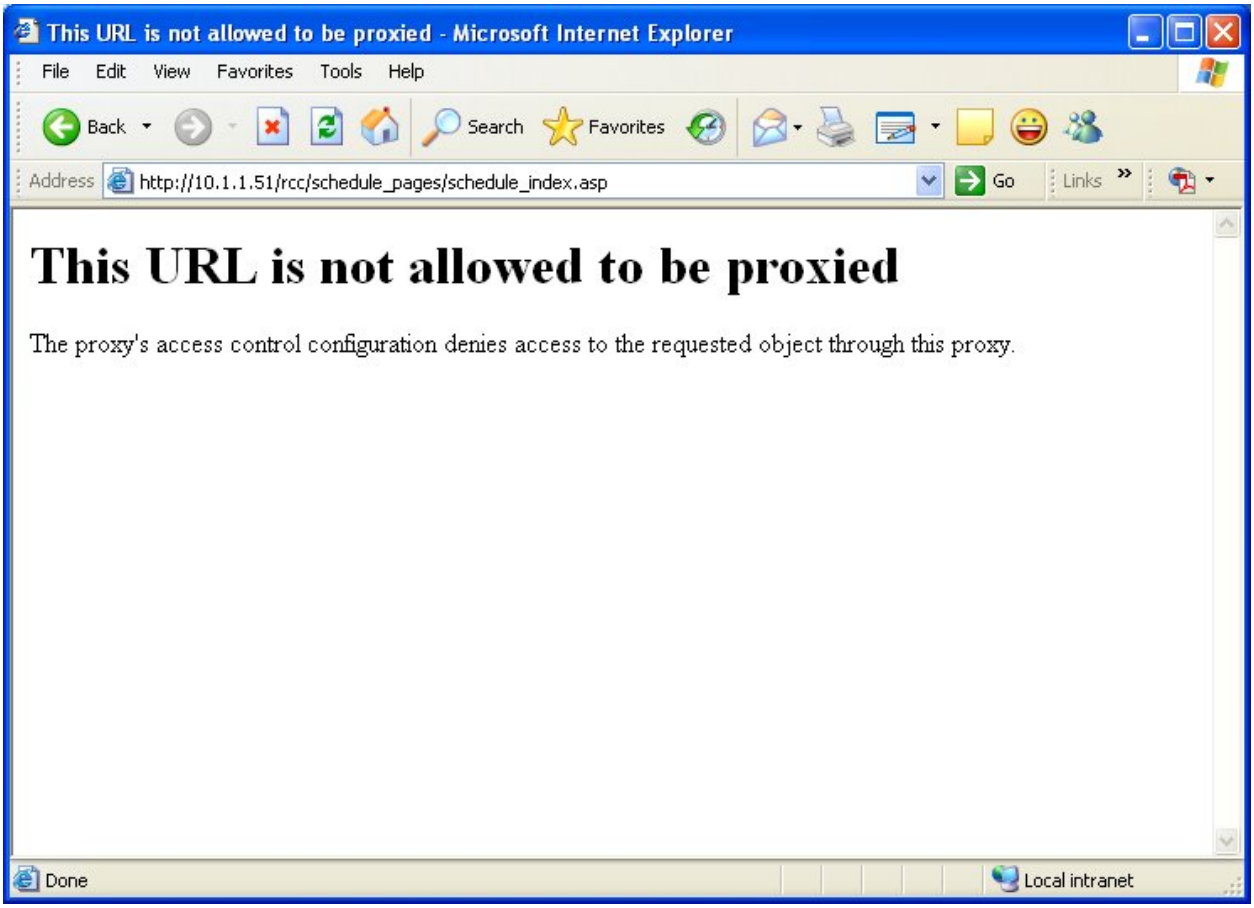

This URL is not allowed to be proxied - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://10.1.1.51/rcc/schedule_pages/schedule_index.asp
Go Links
This URL is not allowed to be proxied
The proxy's access control configuration denies access to the requested object through this proxy.
Done
Local intranet

Figure 14: Proxy server denying access to RCC

For the Client PC to be able to access the Web Host PC, the User can do one of the following on the Client PC. Either:

1. Disable the proxy server, see Disabling the proxy server on a Client PC; or
2. If the Proxy server has to be active, allow the IP Address of the Web Host PC as an exception in the proxy server settings. See Allowing exceptions on the proxy server.

Disabling the proxy server on a Client PC

Follow steps 1 to 4 under Disabling Proxy server on page 56 for the Client PC.

Allowing exceptions on the proxy server

Allow the IP Address of the Web Host PC as an exception in the proxy server settings, as follows:

a. On the **Tools** menu in Internet Explorer, click **Internet Options**, click the **Connections** tab, and then click **LAN Settings**. See Figure 15: Selecting LAN Settings from Connections window.

   The Local Area Network (LAN) Settings window will be displayed.

Figure 15: Selecting LAN Settings from Connections window

b. Under **Proxy server**, the **Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections)** check box will be selected, as shown in Figure 16: Proxy server enabled in the LAN Settings window. Click **Advanced**.

   The Proxy Settings window will open.

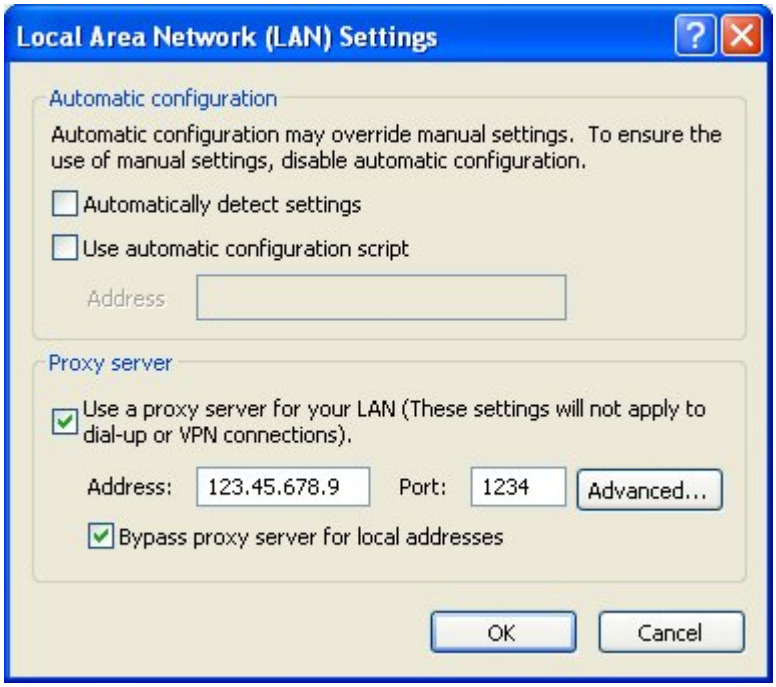

Local Area Network (LAN) Settings
Automatic configuration
Automatic configuration may override manual settings. To ensure the use of manual settings, disable automatic configuration.
Automatically detect settings
Use automatic configuration script
Address
Proxy server
Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections).
Address: 123.45.678.9
Port: 1234
Advanced...
Bypass proxy server for local addresses
OK
Cancel

Figure 16: Proxy server enabled in the LAN Settings window

c. Under **Exceptions**, enter the IP Address of the Web Host PC to by-pass the proxy server. Click **OK**.

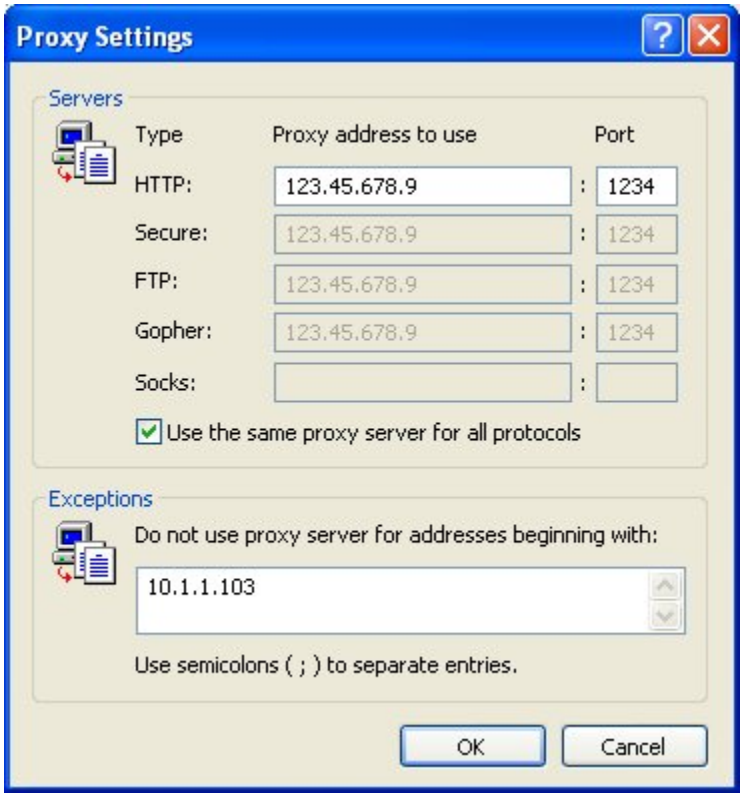


Figure 17: Allowing an IP Address exception in Proxy Settings

d. Click **OK** to close the **LAN Settings** dialog box.

e. Click **OK** again to close the **Internet Options** dialog box.

Historical Reports

Detailed information on the Reports within Reporting for Contact Center can be found in the *Reporting for Contact Center – Reports Explained* (NN40010-626) guide (installed along with this guide on the Web Host PC). This guide details how to use the report viewer, the terms used within Reporting for Contact Center reports, what statistics and formulas are used to calculate each field in the reports (where applicable) and frequently asked questions.

Error on page in Report Viewer

If the Report Viewer window displays the message "Error on Page" in the status bar to the bottom left of the window, the browser window may be caching an older version of Reporting for Contact Center. In this case press **Ctrl**+**F5** to refresh the page with the current version of Reporting for Contact Center.

Reporting Services Restore Utility

The RCC installation forces Reporting Services to create an encryption key. In the unlikely event that the Reporting Services encrytion key is compromised when attempting to view a report, a user may see the following message:

> Microsoft.ReportingServices.Diagnostics.Utilities.ReportServerDisabledException: The report server cannot decrypt the symmetric key used to access sensitive or encrypted data in a report server database. You must either restore a backup key or delete all encrypted content. Check the documentation for more information. (rsReportServerDisabled) (rsRPCError) Get Online Help

The RCC Database Installer Utility (DBI) creates a backup of the reporting data encrytion key after the installation. To restore the Reporting Services encryption key run the Reporting Services Restore Utility (RSR) as follows:

1. From the Start menu select **All Programs > Nortel > Reporting for Contact Center > Reporting Services Restore Utility.**

   Note: For a Web Host PC using a Windows Vista operating system with the User Account Control (UAC) feature turned on, a warning message will be displayed as the RSR utility requires administrator rights to run. Click **Allow** to run the application.

   The RSR Utility dialog box will be displayed as shown in Figure 18: Reporting Services Restore Utility dialog box.

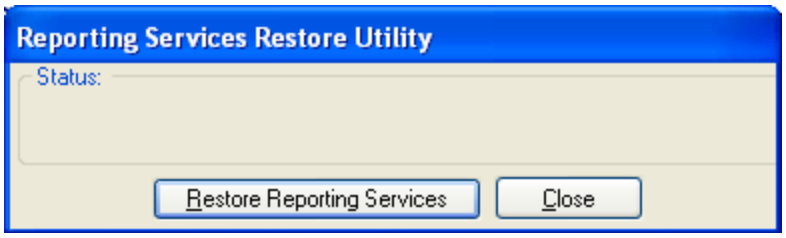


Figure 18: Reporting Services Restore Utility dialog box

2. Click on **Restore Reporting Services** to restore the encryption key from the last restore point created by DBI. When this has been restored successfully the status of the Reporting Services restore operation will be displayed, as shown in Figure 19: Reporting Services restored successfully dialog box.

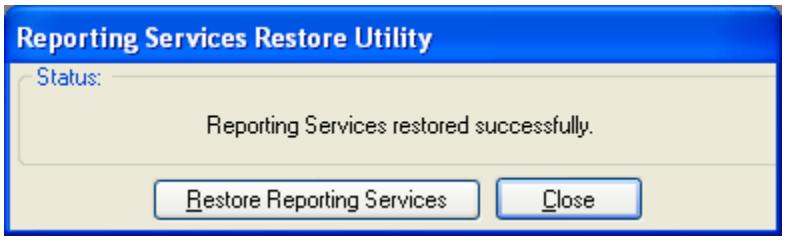


Figure 19: Reporting Services restored successfully dialog box

3. Click **Close**.

   The user should now be able to view the reports.

Real Time screens

Connection Status not green

If the Real Time screen is displayed but the Connection Status indicator on the bottom left of the screen is not green then the RCC Launcher or Microsoft SQL Server 2005 may not be running.

To check if either of these services are running, launch the Install Verification Utility (IVU) from the desktop. If neither of these services are running, they will be launched by the IVU.

Connection Status is red with error message

If there are problems with the Contact Center in the display of the Real Time screens the connection status indicator will be red in color. An error message will also be displayed directly below the connection status indicator describing the error returned from the Contact Center.

Error messages in Real Time screens

The following table, see Table 2: Issues causing the error messages seen in the Real Time screens, lists all the possible error messages that can be displayed in the Real Time screens when the status indicator is red. This table also describes how the user is to resolve these issues.

Error message	Description of the issue
Invalid Request	The request from the client application is not valid, restart the RCC Launcher
Voicemail Service Not Running	The Voicemail service is not running on the Contact Center. Restart the Voicemail service on the Contact Center through the Element Manager
Invalid Password	The password used by the client application is not valid. Enter the correct password, use the CCRS test page to check if you are not sure
No Key Code	The keycode used to turn on the CCRS data stream is not present. Enter the correct keycode
No CC Data	No data is present in the CCRSAppServer database. Configure at least one skillset in CallPilot Manager
No Contact Center Key Code	The keycode used to enable the Contact Center application is not present. Enter the correct keycode
CCRS Disabled	The CCRS data stream is disabled. Enable the CCRSAppServer in the Element Manager
Server Busy	The server is too busy to handle the request (too many simultaneous users). Check that other Reporting for Contact Center clients are not communicating with the same Contact Center, restart the RCC Launcher
CDN Conflict	There is a CDN conflict in the Skillset and CDN identified in the error message, this must be resolved in the CallPilot Manager interface
Unknown Server Error	If none of the above, contact Nortel Support

Table 2: Issues causing the error messages seen in the Real Time screens

To resolve the error messages seen in the Real Time screens, perform the following troubleshooting steps against the error message displayed:

Invalid Request

1. Log on to the Web Host PC as an Administrator.
2. Click on **Start** > **Settings** > **Control Panel** > **Administrative Tools** > **Services.**
3. Select **RCC Launcher** Service. Right-click and select **Stop**.
4. Wait 10-15 seconds.
5. Select **RCC Launcher** Service again, right-click and select **Start**.

Voicemail Service Not Running

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.
2. To connect to the BCM system, under **Element Navigation Panel** expand **Network Elements** and select the system to connect to. Enter the User ID and Password and click **Connect**.
3. From the Task Navigation Panel select the **Administration** tab.
4. Expand the **General** folder and click **Service Manager**. A list of all the services on the BCM are displayed.
5. Locate and verify that the following services are flagged with the Startup as **Enabled** and Status as **Running**:
   - voicemail

   For BCM 4.0 and BCM50 3.0 systems only, the following service should also be verified:

   - CCRSAppServer
6. If any of these services are not running, select the service and click **Start**. Click **Yes** in the warning message box to confirm start-up of the service.
7. Wait 30-60 seconds for the service to start.

If the service does not start, contact Nortel Support.

Invalid Password

Verify the CCRS Password and that the XML data stream from the Contact Center is enabled by the following:

1. Open CallPilot Manager by entering the following location in the browser Address bar: http://[BCM IP Address]/callpilotmanager
2. Enter the User ID and Password and click **Submit**.
3. From the navigation menu on the left, click **Contact Center**.
4. Select **General Properties** to open the Contact Center Properties page.
5. Delete any password in the **CC Reporting Server Password** field, and re-enter the Contact Center Reporting Server Password.
6. Confirm the password in the **Confirm Password** field.
7. Ensure the **Enable CC Reporting Data Stream** check box is selected.
8. Click **Submit** to accept the changes.

From Reporting for Contact Center, attempt a connection to the Contact Center, by the following:

1. Open the Contact Center Connection page as described in Contact Center Connection page item on page 79.
2. Enter the details into the Contact Center Connection page including the newly confirmed CCRS password and click **Submit**.

The Download Data window should display call data downloading from the Contact Center.

Another method for confirming the CCRS password and to verify that XML data is being received from the Contact Center, execute the CCRS Test page, as follows:

1. See CCRS Test Page on page 111 for instructions on how to execute the CCRS Test page.
2. Ensure the CCRS password is the same as that configured in CallPilot Manager.

Once the CCRS Test page is submitted, XML data should be returned and not display an InvalidPassword XML error page, as shown in Figure 49: InvalidPassword XML error in CCRS Test page.

No Key Code

Perform the following steps to check that the keycode for the CCRS data stream is active:

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.
2. To connect to the BCM, under **Element Navigation Panel** expand **Network Elements** and select the BCM.
3. Enter the logon User ID and Password for an administrator and click **Connect**.
4. From the Task Navigation Panel select the **Configuration** tab.
5. Expand the **System** folder and click **Keycodes**. A list of all the keycodes on the BCM are displayed, as well as those that have not been activated.
6. Verify that the following Keycodes are flagged as **ACTIVE**:
    - ICC
    - ICC Skillset (at least one)
    - ICC Reporting

If the keycodes listed in step 6 are not active and the user requires them on the BCM system, contact your distributor who can verify whether or not the system needs the keycodes. This will be done through the Nortel Keycode Retrieval System (KRS).

No CC Data

No data is present in the CCRSAppServer database. Configure at least one skillset in CallPilot Manager.

No Contact Center Key Code

Perform the following steps to check that the Contact Center application keycode is enabled:

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.
2. To connect to the BCM, under **Element Navigation Panel** expand **Network Elements** and select the BCM.
3. Enter the logon User ID and Password for an administrator and click **Connect**.
4. From the Task Navigation Panel select the **Configuration** tab.
5. Expand the **System** folder and click **Keycodes**. A list of all the keycodes on the BCM are displayed, as well as those that have not been activated.
6. Verify that the following Keycodes are flagged as **ACTIVE**:
    - ICC
    - ICC Skillset (at least one)
    - ICC Reporting

If the keycodes listed in step 6 are not active and the user requires them on the BCM system, contact your distributor who can verify whether or not the system needs the keycodes. This will be done through the Nortel Keycode Retrieval System (KRS).

CCRS Disabled

Perform the following task:

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.
2. To connect to the BCM, under **Element Navigation Panel** expand **Network Elements** and select the system to connect to. Enter the User ID and Password and click **Connect**.
3. From the Task Navigation Panel select the **Administration** tab.
4. Expand the **General** folder and click **Service Manager**. A list of all the services on the BCM is displayed.
5. Locate and verify that the following services are flagged with the Startup as **Enabled** and Status as **Running**:
    - voicemail

    For BCM 4.0 and BCM50 3.0 systems only, the following service should also be verified:

    - CCRSAppServer

6. If any of these services are not running, select the service and click **Start**. Click **Yes** in the warning message box to confirm start-up of the service.
7. Wait 30-60 seconds for the service to start.

If the service does not start, contact Nortel Support.

Server Busy

The user should contact their network administrator or support technician to diagnose if multiple PCs are connecting to the same Contact Center.

Restart RCC Launcher as described in Invalid Password on page 66.

CDN Conflict

The Real Time screen will display an error message generated in Reporting for Contact Center, detailing the Skillset that has a conflicting CDN. The message displayed will be:

There is a CDN conflict with the ***** skillset using CDN #####

The ***** syntax denotes the Skillset name, and ##### denotes the CDN number.

Contact your network administrator to resolve the conflicting device[§] that has caused the CDN conflict, as per one of the following:

- A newly added telephone set or device, or other Nortel peripheral attachment, is physically residing on the port that is logically assigned to the Contact Center; or
- A Voice-over IP (VoIP) telephone set has been manually, or automatically, assigned a Contact Center CDN.

On determining which device is conflicting with this CDN, whether it is a physical device or an IP set de-register, disconnect it from the BCM.

Once the conflict has been resolved the Skillset must be re-enabled, as follows:

1. Open CallPilot Manager by entering the following location in the browser Address bar: http://[BCM IP Address]/callpilotmanager
2. Enter the User ID and Password and click **Submit**.
3. From the navigation menu on the left, click **Contact Center**.
4. Select **Skillset List** to open the Skillset List page.
5. Click **Enable** on the disabled Skillset experiencing the CDN conflict.

   Note: A banner would display which Skillset/CDN is experiencing conflict from the Call Pilot Manager interface.

§ This can be an Analog Station Module, MTT logger, or any other Nortel or Norstar device.

Unknown Server Error

Contact your distributor for first level support.

If you are a distributor, contact Nortel Solutions Center, see Getting Help over the phone from a Nortel Solutions Center on page 12. If you prefer to raise a case directly through the Nortel Web site, refer to the section Getting Help from the Nortel Web site on page 11.

Slow updates on Real Time screen

The Real Time screens should be updated approximately every 1 or 3 seconds depending on your Contact Center configuration in the Contact Center Connection page of Reporting for Contact Center.

To increase the Real Time and Wallboard refresh rate to 3 seconds perform the following:

1. Launch and logon to Reporting for Contact Center as an Administrator.
2. From the navigation menu on the left, click on the **Contact Center Connection** item.
3. From the **Wallboard and Real Time Refresh Interval** drop down box select **3** seconds.
4. Click **Submit**.

If the Real Time screens still seem to be slow or sluggish, the following section, Web Host PC Requires a Host File entry, should be checked.

Web Host PC Requires a Host File entry

Check with your Network Administrator to add an entry in the Web Host PC Host file. This is a Windows system file and is usually located in the \Windows\System32\drivers\etc folder on the Web Host PC (this may be called the \Windows\System32\drivers\etc folder).

You must enter the IP Address and the network name (machine name) of the Business Communications Manager to this file. Separate the two items by using the Tab key.

An example Host file is shown in Figure 20: Example Host File.

```
# Copyright I 1993-1999 Microsoft Corp.
#
# This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
#
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space.
#
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
#      102.54.94.97     rhino.acme.com          # source server
#       38.25.63.10     x.acme.com              # x client host

127.0.0.1        Localhost
10.1.1.105       BCMMachineName
```

Figure 20: Example Host File

Real Time screens are not displayed

If Real Time screens are not displayed after making Skillset and Real Time screen selections from the Real Time page, pop-up blocking may be enabled on the PC. For a Client PC, see Allowing pop-ups on page 92 to change the pop-up blocker settings.

If Norton Internet Security is installed on your PC and the Real Time screens are not being displayed, ad blocking may be enabled. See the following section Ad Blocking in Norton Internet Security to disable ad blocking.

Ad Blocking in Norton Internet Security

To disable Ad Blocking in Norton Internet Security perform the following:

1. Open the Norton Internet Security application.
2. Open the Status and Settings page from the menu to the left of the page.
3. Click the **Ad Blocking** option. See Figure 21: Ad Blocking option in Norton Internet Security.

Figure 21: Ad Blocking option in Norton Internet Security

This opens the Ad Blocking window.

4. Clear the **Turn on Popup Window Blocking** check box, see Figure 22: Ad Blocking Window in Norton Internet Security.

   This will disable any window blocking by Norton Internet Security and prevent Real Time screens being blocked in Reporting for Contact Center.

Norton Internet Security
Ad Blocking
Tell me more
Ad Blocking helps eliminate unwanted ad banners and pop-up ads on Web pages.
Turn on Ad Blocking
Turn on Popup Window Blocking
Shop NOW and SAVE!
Ad Trashcan
The Ad Trashcan lets you remove ads from Web pages and create new Ad Blocking rules.
OK

Figure 22: Ad Blocking Window in Norton Internet Security

5. Click **OK** to close the Ad Blocking window.

6. Close Norton Internet Security.

The Real Time screens should now open up on clicking the **Submit** button on the Real Time page.

Wallboards

*ip*View SoftBoard and Wallboard Summaries

Wallboard Summaries are sent to the wallboards on the hour, according to the time of the Web Host PC clock. The regular hourly and daily statistics that are sent to the wallboard are governed by the Contact Center platform clock. The hourly statistics are reset to 0 on the hour, according to the clock in the Contact Center platform.

If the clock in the Web Host PC is set to a different time than the clock in the Contact Center platform, the hourly Summaries will not be synchronized with the hourly reset of the regular statistics. To ensure that the wallboard summaries are in time with the hourly resets of the regular wallboard statistics, ensure that your PC and Contact Center platform times are the same.

IP Address of the Hardware Wallboard

To obtain the correct IP Address of the Hardware Wallboard perform the following:

1. Disconnect the Wallboard from its power supply.
2. Reconnect the power supply. The IP Address will be displayed shortly.

Pause in parameter count on the Hardware Wallboard

If the wallboard parameters do not refresh every 1 or 3 seconds but display a pause in the count, for instance in the QT time, the Microsoft Indexing Service may be running on the Web Host PC, or the Client PC that the hardware wallboard is directly connected to.

The Microsoft Indexing Service helps to create fast searches of files on your PC. But this can also take up a lot of processor usage on your PC. This will in turn slow down other processes running on your PC including the wallboarddriver.exe process that updates the parameters to the wallboard. To prevent this from happening, stop the Indexing Service and set it to start up manually as follows:

1. From the Start menu, click on **Settings > Control Panel > Administrative Tools > Services.**
2. Click on the **Extended** tab and locate **Indexing Service**.
3. Right-click on **Indexing Service** and select **Stop**.

Once Indexing Service has stopped running on your PC, check that the startup type is set to **Manual**. If this is not set to **Manual**, go to step 4.

1. Right-click on **Indexing Service** and select **Properties** to open the Properties window.

2. In the General tab, see Figure 23: Indexing Service Properties General window, from **Startup type** select **Manual**.

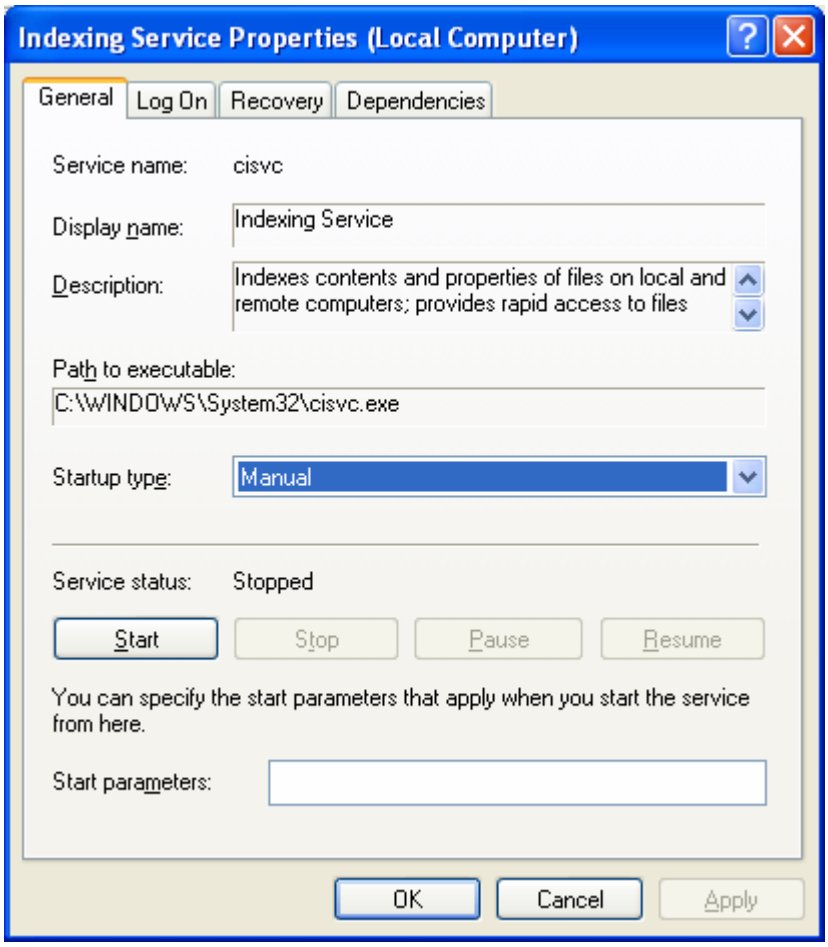


Figure 23: Indexing Service Properties General window

3. Click **OK** to close the General window.

Close the Services, Administrative Tools and Control Panel windows.

Further problems with the ipView SoftBoard or Hardboard

Detailed information on the operation of *ip***View** SoftBoard or Hardboards can be found in the *ipView Software Wallboard Setup and Operations Guide* (NN40010-500). This is installed along with Reporting for Contact Center on the Web Host PC.

Printing report

Reports are not printing

Check the printer

Using the same printer as selected in your print schedule, attempt to print a document, this can be anything and if you do not have a document available create one in Notepad. If the document fails to print, consult your network administrator.

Check the print schedule

Check that the report was configured to print on the correct day. Daily Reports print the day after the day which is being reported. That is, if you select a Daily Report Schedule for Monday, it prints on Tuesday. This ensures that the report day has completely elapsed when the reports are generated.

Print Caller Service (PCS)

For print schedules to print, the Print Caller Service (PCS) must be running, if it is not running as a service a user must be logged on to a PC. Logging a user on the PC will automatically launch PCS. However to check if it is running perform the following:

1. Open the Windows **Task Manager** by pressing **Ctrl+Alt+Delete**.
2. Click **Task Manager**.
3. Click the **Processes** tab.
4. Search for the item **printCaller.exe**.
5. If it does not appear in that list then Print Caller Service (PCS) is not running.

To re-launch PCS either reboot the PC or click **Start > All Programs > Startup > RCC Monitor**.

Miscellaneous

Contact Center Connection page item

To open the Contact Center Connection page perform the following:

1. Log on to Reporting for Contact Center.
2. From the navigation menu on the left panel click **Contact Center Connection**.

The Contact Center Connection page will be displayed in the browser window.

Error messages

Error in Download Contact Center data window

The following table, see Table 3: Issues causing the error messages in the Download Contact Center data window, lists the error messages displayed in the Download Contact Center data window when the status indicator is red. This table also describes how the user is to resolve the issue.

Error message	Description of the issue
InvalidRequest	The request from the client application is not valid, restart the RCC Launcher
VMServiceNotRunning	The Voicemail service is not running on the Contact Center. Restart the Voicemail service on the Contact Center through the Element Manager
InvalidPassword	The password used by the client application is not valid. Enter the correct password, use the CCRS test page to check if you are not sure
NoKeyCode	The keycode used to turn on the CCRS data stream is not present. Enter the correct keycode
NoCCData	No data is present in the CCRSAppServer database. Configure at least one skillset in CallPilot Manager
NoCCKeyCode	The keycode used to enable the Contact Center application is not present. Enter the correct keycode
CCRSDisabled	The CCRS data stream is disabled. Enable the CCRSAppServer in Element Manager
ServerBusy	The server is too busy to handle the request (too many simultaneous users). Check that other Reporting for Contact Center clients are not communicating with the same Contact Center, restart the RCC Launcher
CannotConnectToCC	The CCRS cannot contact the Contact Center
CannotConnectToDB	Could not connect to the database
CCRefusedConnection	Indicates that the Contact Center refused to register the AppServer
HistoricalReqOver3Hours	The request from the client application is not valid (exceeds three hours), restart the RCC Launcher
UnknownServerError	If none of the above, contact Nortel Support

Table 3: Issues causing the error messages in the Download Contact Center data window

To resolve the error messages seen in the Download Contact Center data window, perform the following troubleshooting steps against the error message displayed:

InvalidRequest

1. Log on to the Web Host PC as an Administrator.
2. Click on **Start** > **Settings** > **Control Panel** > **Administrative Tools** > **Services.**
3. Select **RCC Launcher** Service. Right-click and select **Stop**.

4. Wait 10-15 seconds.
5. Select **RCC Launcher** Service again, right-click and select **Start**.

VMServiceNotRunning

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.
2. To connect to the BCM system, under **Element Navigation Panel** expand **Network Elements** and select the system to connect to. Enter the User ID and Password and click **Connect**.
3. From the Task Navigation Panel select the **Administration** tab.
4. Expand the **General** folder and click **Service Manager**. A list of all the services on the BCM are displayed.
5. Locate and verify that the following services are flagged with the Startup as **Enabled** and Status as **Running**:
   - voicemail

   For BCM 4.0 and BCM50 3.0 systems only, the following service should also be verified:

   - CCRSAppServer
6. If any of these services are not running, select the service and click **Start**. Click **Yes** in the warning message box to confirm start-up of the service.
7. Wait 30-60 seconds for the service to start.

If the service does not start, contact Nortel Support.

InvalidPassword

Verify the CCRS Password and that the XML data stream from the Contact Center is enabled by the following:

1. Open CallPilot Manager by entering the following location in the browser Address bar: http://[BCM IP Address]/callpilotmanager
2. Enter the User ID and Password and click **Submit**.
3. From the navigation menu on the left, click **Contact Center**.
4. Select **General Properties** to open the Contact Center Properties page.
5. Delete any password in the **CC Reporting Server Password** field, and re-enter the Contact Center Reporting Server Password.
6. Confirm the password in the **Confirm Password** field.

7. Ensure the **Enable CC Reporting Data Stream** check box is selected.
8. Click **Submit** to accept the changes.

From Reporting for Contact Center, attempt a connection to the Contact Center, by the following:

1. Open the Contact Center Connection page as described in Contact Center Connection page item on page 79.
2. Enter the details into the Contact Center Connection page including the newly confirmed CCRS password and click **Submit**.

The Download Data window should display call data downloading from the Contact Center.

Another method for confirming the CCRS password and to verify that XML data is being received from the Contact Center, execute the CCRS Test page, as follows:

1. See CCRS Test Page on page 111 for instructions on how to execute the CCRS Test page.
2. Ensure the CCRS password is the same as that configured in CallPilot Manager.

Once the CCRS Test page is submitted, XML data should be returned and not display an InvalidPassword XML error page, as shown in Figure 49: InvalidPassword XML error in CCRS Test page.

NoKeyCode

Perform the following steps to check that the keycode for the CCRS data stream is active:

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.
2. To connect to the BCM, under **Element Navigation Panel** expand **Network Elements** and select the BCM.
3. Enter the logon User ID and Password for an administrator and click **Connect**.
4. From the Task Navigation Panel select the **Configuration** tab.
5. Expand the **System** folder and click **Keycodes**. A list of all the keycodes on the BCM are displayed, as well as those that have not been activated.
6. Verify that the following Keycodes are flagged as **ACTIVE**:
    - ICC
    - ICC Skillset (at least one)
    - ICC Reporting

If the keycodes listed in step 6 are not active and the user requires them on the BCM system, contact your distributor who can verify whether or not the system needs the keycodes. This will be done through the Nortel Keycode Retrieval System (KRS).

NoCCData

No data is present in the CCRSAppServer database. Configure at least one skillset in CallPilot Manager as follows:

1. Open CallPilot Manager by entering the following location in the browser Address bar: http://[BCM IP Address]/callpilotmanager
2. Enter the User ID and Password and click **Submit**.
3. From the navigation menu on the left, click **Contact Center**.
4. Select **Skillset List** to open the Skillset List page.
5. Click on **Configure** to open the Skillset Properties page. Enter the properties to create a new skillset and click **Submit**.

The XML for the newly created skillset will be updated in the CCRSAppServer. The data will be available to RCC in the next data query.

NoCCKeyCode

Perform the following steps to check that the Contact Center application keycode is enabled:

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.
2. To connect to the BCM, under **Element Navigation Panel** expand **Network Elements** and select the BCM.
3. Enter the logon User ID and Password for an administrator and click **Connect**.
4. From the Task Navigation Panel select the **Configuration** tab.
5. Expand the **System** folder and click **Keycodes**. A list of all the keycodes on the BCM are displayed, as well as those that have not been activated.
6. Verify that the following Keycodes are flagged as **ACTIVE**:
    - ICC
    - ICC Skillset (at least one)
    - ICC Reporting

If the keycodes listed in step 6 are not active and the user requires them on the BCM system, contact your distributor who can verify whether or not the system needs the keycodes. This will be done through the Nortel Keycode Retrieval System (KRS).

CCRSDisabled

Perform the following steps:

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.
2. To connect to the BCM system, under **Element Navigation Panel** expand **Network Elements** and select the system to connect to. Enter the User ID and Password and click **Connect**.
3. From the Task Navigation Panel select the **Administration** tab.
4. Expand the **General** folder and click **Service Manager**. A list of all the services on the BCM is displayed.
5. Locate and verify that the following services are flagged with the Startup as **Enabled** and Status as **Running**:

    a. voicemail

    For BCM 4.0 and BCM50 3.0 systems only, the following service should also be verified:

    b. CCRSAppServer
6. If any of these services are not running, select the service and click **Start**. Click **Yes** in the warning message box to confirm start-up of the service.
7. Wait 30-60 seconds for the service to start.

If the service does not start, contact Nortel Support.

ServerBusy

The user should contact their network administrator or support technician to diagnose if multiple PCs are connecting to the same Contact Center.

Restart RCC Launcher as described in InvalidRequest on page 80.

CannotConnectToCC

The Contact Center Reporting Server can not connect to the Contact Center. This can be due to either one of the following reasons:

- The Contact Center is disabled. The Voicemail and CCRSAppServer (on BCM 4.0 and BCM50 3.0 only) Services have to be started.
- There are multiple PCs attempting to access the Contact Center.

1. The Contact Center is disabled. Perform the following steps to start the Voicemail and CCRSAppServer (on BCM 4.0 and BCM50 3.0 only) Services:

   a. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.

   b. To connect to the BCM system, under **Element Navigation Panel** expand **Network Elements** and select the system to connect to. Enter the User ID and Password and click **Connect**.

   c. From the Task Navigation Panel select the **Administration** tab.

   d. Expand the **General** folder and click **Service Manager**. A list of all the services on the BCM is displayed.

   e. Locate and verify that the following services are flagged with the Startup as **Enabled** and Status as **Running**:

   f. voicemail

   For BCM 4.0 and BCM50 3.0 systems only, the following service should also be verified:

   g. CCRSAppServer

   h. If any of these services are not running, select the service and click **Start**. Click **Yes** in the warning message box to confirm start-up of the service.

   i. Wait 30-60 seconds for the service to start.

   If the service does not start, contact Nortel Support.

2. There are multiple PCs attempting to access the Contact Center. Refer to the ServerBusy section on page 84 for resolving multiple PCs accessing the Contact Center.

CannotConnectToDB

This XML error is the result of the Database Service being stopped on the Contact Center server side. Perform the following procedures for either a BCM 4.0, BCM50 2.0, or a BCM50 3.0 system.

Starting the database service on a BCM 4.0 or a BCM50 3.0 system:

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.
2. From **Element Navigation Panel** expand **Network Elements** and select your BCM system to connect to. Enter the User ID and Password and click **Connect**.
3. From the Task Navigation Panel select the **Administration** tab.
4. Expand the **General** folder and click **Service Manager**. A list of all the services on the BCM is displayed.

5. Locate **postgres** service and ensure it is set to **Enabled** and **Running**.
6. If not, select **postgres** service and click **Stop**. In the confirmation message box, click **Yes** to stop the Postgres service.
7. Wait 30-60 seconds.
8. Select **postgres** from the list of services and click **Start**. Click **Yes** in the warning message box to confirm restarting the service.
9. Wait 30-60 seconds for Postgres service to restart.

Starting the database service on a BCM50 2.0 system:

1. Log on to the PC hosting the Contact Center Reporting Server (CCRS, also known as the Application Server, or AppServer) as an Administrator.
2. Click on **Start** > **Settings** > **Control Panel** > **Administrative Tools** > **Services.**
3. Locate **MSSQL$NN_CCRS** Service. Ensure the service is set to **Started** and **Automatic** startup.
4. If the service is not running, select **MSSQL$NN_CCRS** Service, right-click and select **Start.**
5. If the service startup type is not set to **Automatic**, right-click on the service and select **Properties** to open the MSSQL$NN_CCRS Properties window. On the **General** tab change **Startup type:** to **Automatic**. Click **Apply** and click **OK**.

CCRefusedConnection

Contact your network administrator or support technician to diagnose if multiple PCs are connecting to the same Contact Center, as the Contact Center refused to register CCRS.

HistoricalReqOver3Hours

Either Reporting for Contact Center, or the CCRS Test page has made a request of over 3 hours of historical data from the Contact Center. The server or services have not failed; this is merely an invalid query for BCM 4.0 and BCM50 2.0 systems. For the CCRS Test page adjust your query to be a maximum of 3 hours, see step 6 in CCRS Test Page on page 111.

Restart RCC Launcher on the Web Host PC, as described in InvalidRequest on page 80.

UnknownServerError

Contact your distributor for first level support.

If you are a distributor, contact Nortel Solutions Center, see Getting Help over the phone from a

Nortel Solutions Center on page 12. If you prefer to raise a case directly through the Nortel Web site, refer to the section Getting Help from the Nortel Web site on page 11.

Client PC Troubleshooting 7

This section deals with problems that occur on a client PC and how to resolve those issues. A client PC is defined as a PC connecting to the Web Host PC in an attempt to access the Reporting for Contact Center application.

Tips for Internet Explorer

Internet Explorer cache

Deleting temporary Internet files

After an upgrade of Nortel Reporting for Contact Center, Internet Explorer may be caching old versions of the Nortel Reporting for Contact Center Web pages. The temporary Internet files on your computer will have to be deleted as follows:

1. Click **Start**, then right-click the **Internet Explorer** icon, and select **Internet Properties**. See Figure 24: Internet Properties Dialog Box.

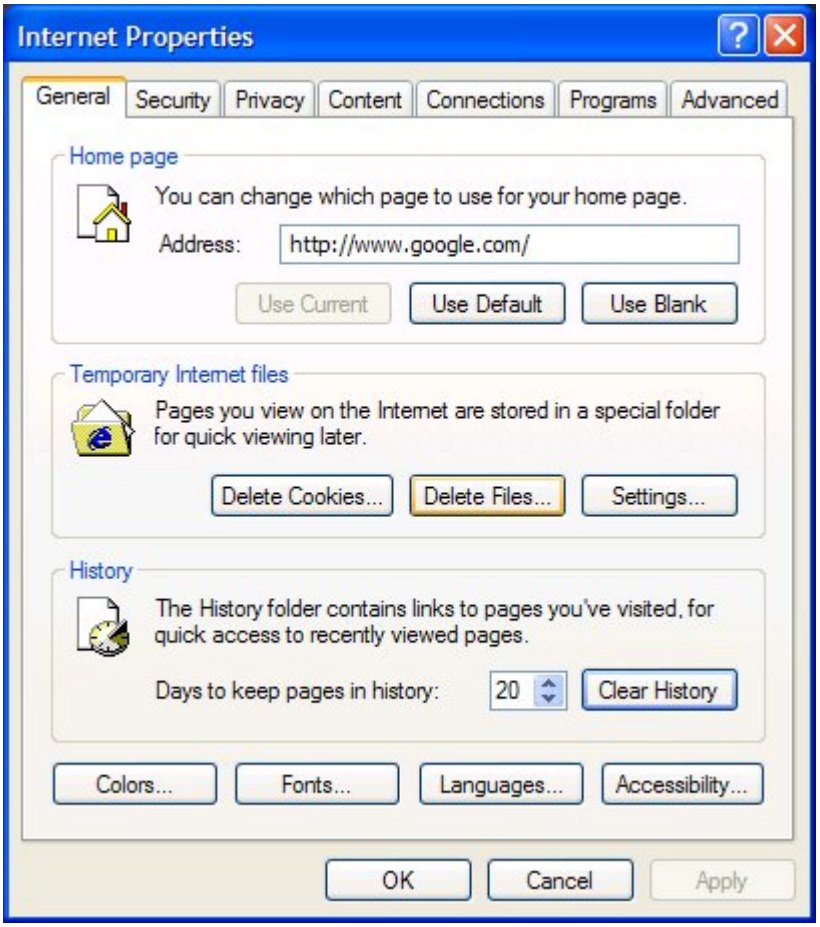


Figure 24: Internet Properties Dialog Box

Note: If you do not see the dialog box shown in Figure 24, you have clicked a shortcut to Internet Explorer. You must click the Internet Explorer icon in the Start menu.

2. When you see the window shown in Figure 24, click **Delete Files**. The **Delete Files** dialog shown in Figure 25: Delete Files Dialog appears.

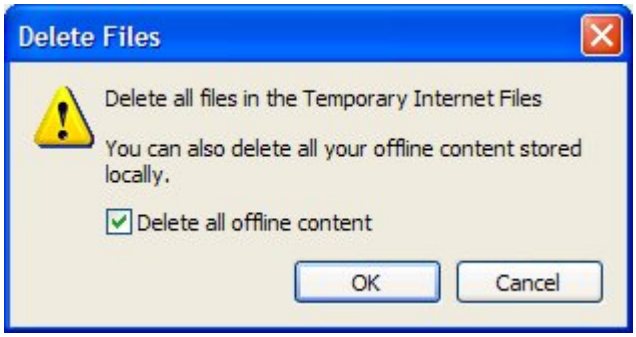

Delete Files
Delete all files in the Temporary Internet Files
You can also delete all your offline content stored locally.
Delete all offline content
OK
Cancel

Figure 25: Delete Files Dialog

3. Select **Delete all offline content**, and then click **OK**.

4. Click **OK** to close the **Internet Properties** window.

The user can proceed with the installation of Nortel Reporting for Contact Center, as described in the *Reporting for Contact Center Setup and Operations Guide* (NN40040-303).

Launching Reporting for Contact Center from a shortcut

If an Internet Explorer shortcut has been created to launch the Reporting for Contact Center Login page, you must ensure that Reporting for Contact Center is launched in a new window. If this is not done so, and only one Internet Explorer window is left open at the time of launching Reporting for Contact Center from the shortcut, Reporting for Contact Center will open in that window, even if it is a fixed sized window such as a Reporting for Contact Center Real Time screen.

Follow these steps to launch a Reporting for Contact Center shortcut in a new window:

1. Click **Start**, then right-click the **Internet Explorer** icon, and select **Internet Properties**. See Figure 7: Internet Properties Dialog Box.

   Note: If you do not see the dialog box shown in Figure 7: Internet Properties Dialog Box, you have clicked a shortcut to Internet Explorer. You must click the Internet Explorer icon in the Start menu.

2. Click on the **Advanced** tab and scroll down to the setting, **Reuse windows for launching shortcuts**, see Figure 26: Internet Properties Advanced window Settings. Make sure that the check box is cleared.

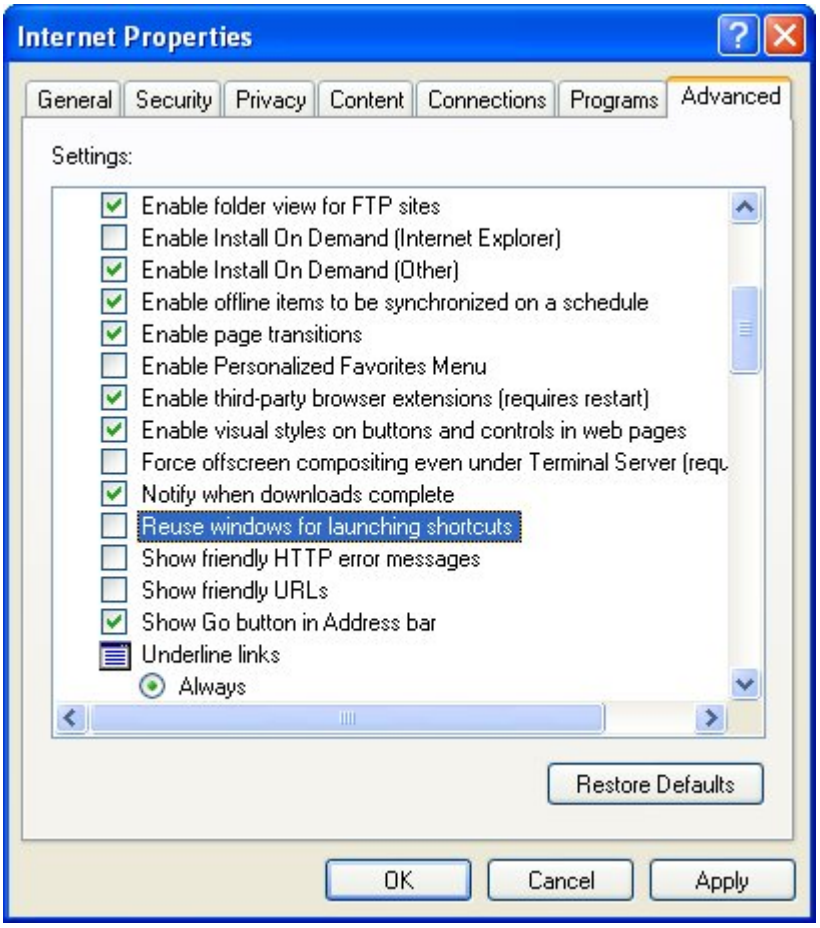


Figure 26: Internet Properties Advanced window Settings

3. Click **OK** to close the Internet Properties dialog box.

Internet Explorer security settings

Ensure that the Internet Explorer security settings on the Client PC allow the ActiveX Report Viewer and Java Runtime Environment 6 (if not already installed on the Client PC) to be downloaded from the Web Host PC to view the Reports and Real Time screens, respectively, by the following:

1. Click **Start** and right-click the Internet Explorer icon. Select **Internet Properties**.

2. Click on the **Security** tab. See Figure 27: Internet Options Security window.

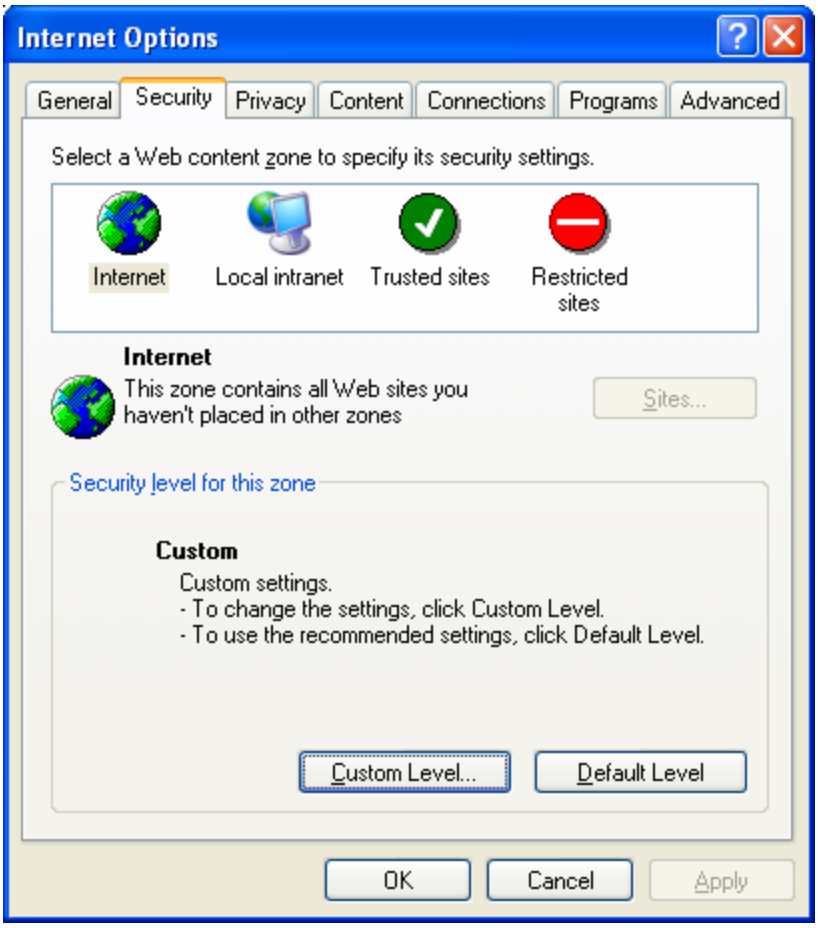


Figure 27: Internet Options Security window

To change the security settings, select the Web content zone used to connect to the Web Host PC – contact your network administrator for any assistance required, as follows:

- If the Internet is used to access the Web Host PC, for instance, using an IP Address, for example, **http://10.10.10.102/rcc**, select **Internet**;
- If your intranet is used to access the Web Host PC, for instance, a network name is used, for example, **http://AndysPC/rcc**, select **Local intranet**; or
- If the Web Host PC has been added as a trusted site to access RCC (select **Trusted sites** and click **Sites** to view all trusted sites), select **Trusted sites**;

3. Under **Security level for this zone** for the Web zone selected in step 2, click the **Custom Level** button. The Security Settings window will open.

4. From the Security Settings window scroll down to **Download signed ActiveX controls**, as shown in Figure 28: Security Settings window. Select the **Enable** check box.

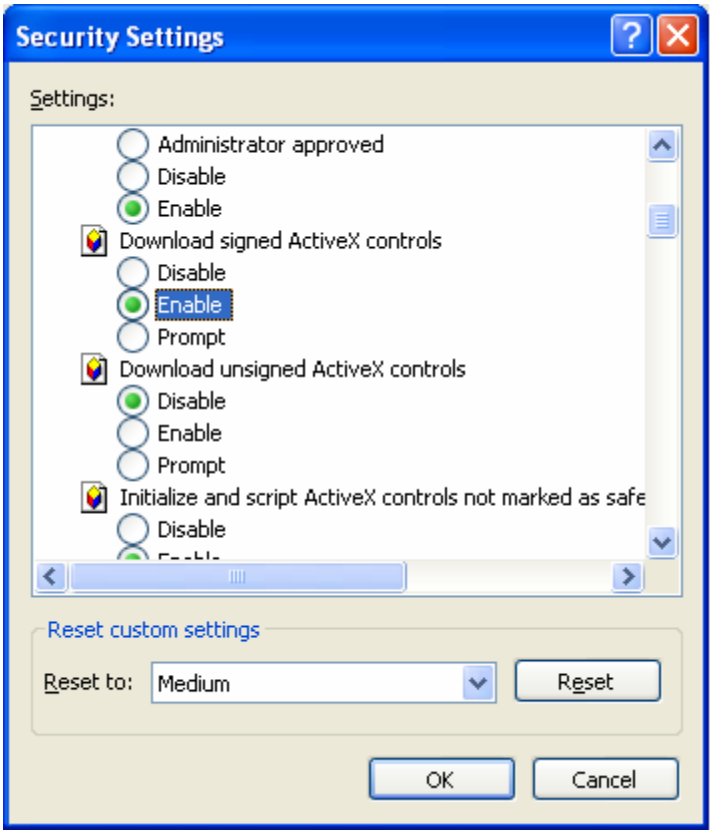


Figure 28: Security Settings window

Under **Download unsigned ActiveX controls**, select the **Prompt** check box.

5. Click **OK** to allow the download of signed and unsigned ActiveX controls.

6. On the Internet Options window, click **OK** to close the window.

7. If an RCC Web page is already open, click **Ctrl+F5** to enable the Internet Explorer security settings.

Allowing pop-ups

If you are unable to view the Real Time screens and a **Pop-ups were blocked** icon is displayed in the status bar, change your pop-up blocker settings as follows:

1. In Internet Explorer, from the menu select **Tools > Pop-up Blocker > Pop-up Blocker Settings**. The Pop-up Blocker Settings window will open, as shown in Figure 29: Pop-up Blocker Settings dialog box.

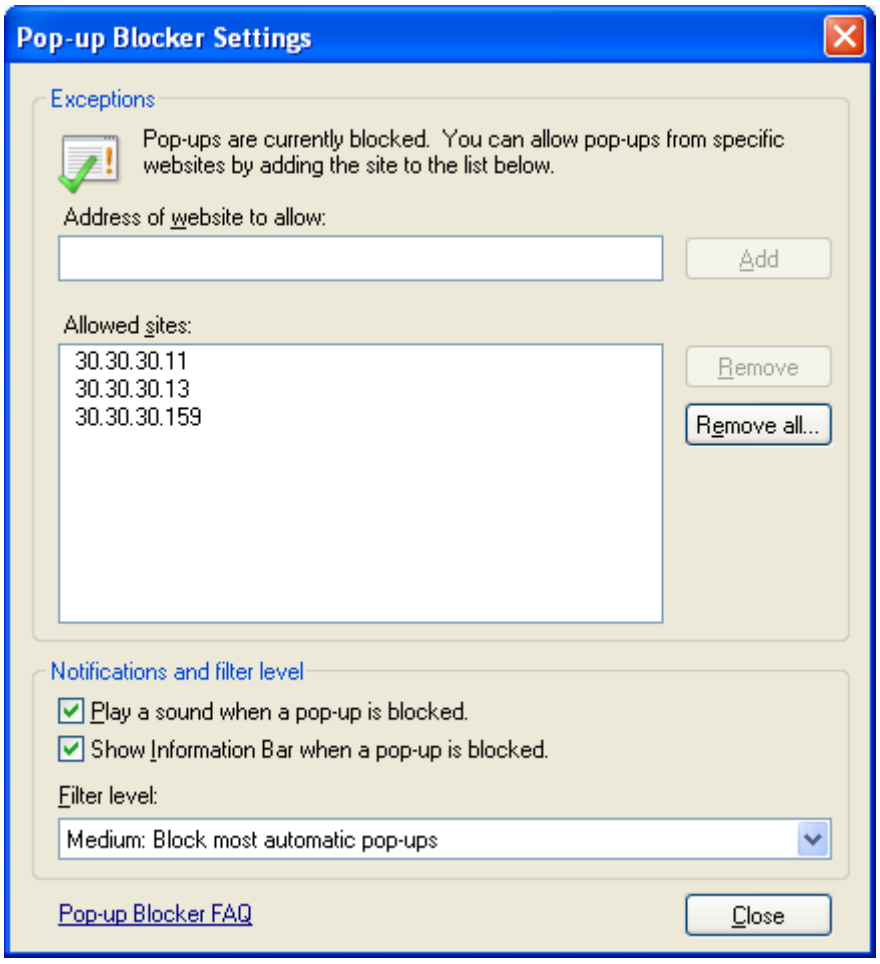


Figure 29: Pop-up Blocker Settings dialog box

2. In the **Address of website to allow** box, type the IP address or website of the Web Host PC you want to view the Real Time screen pop-ups from.

3. Click **Add** and **Close**.

   You should now be able to view Real Time screens.

Alternatively, if pop-ups are blocked from the Web Host PC, and an information bar is displayed in the Real Time page, perform the following:

1. Click on the information bar and select **Always Allow Pop-ups from This Site**, as shown in Figure 30: Pop-up options from information bar.

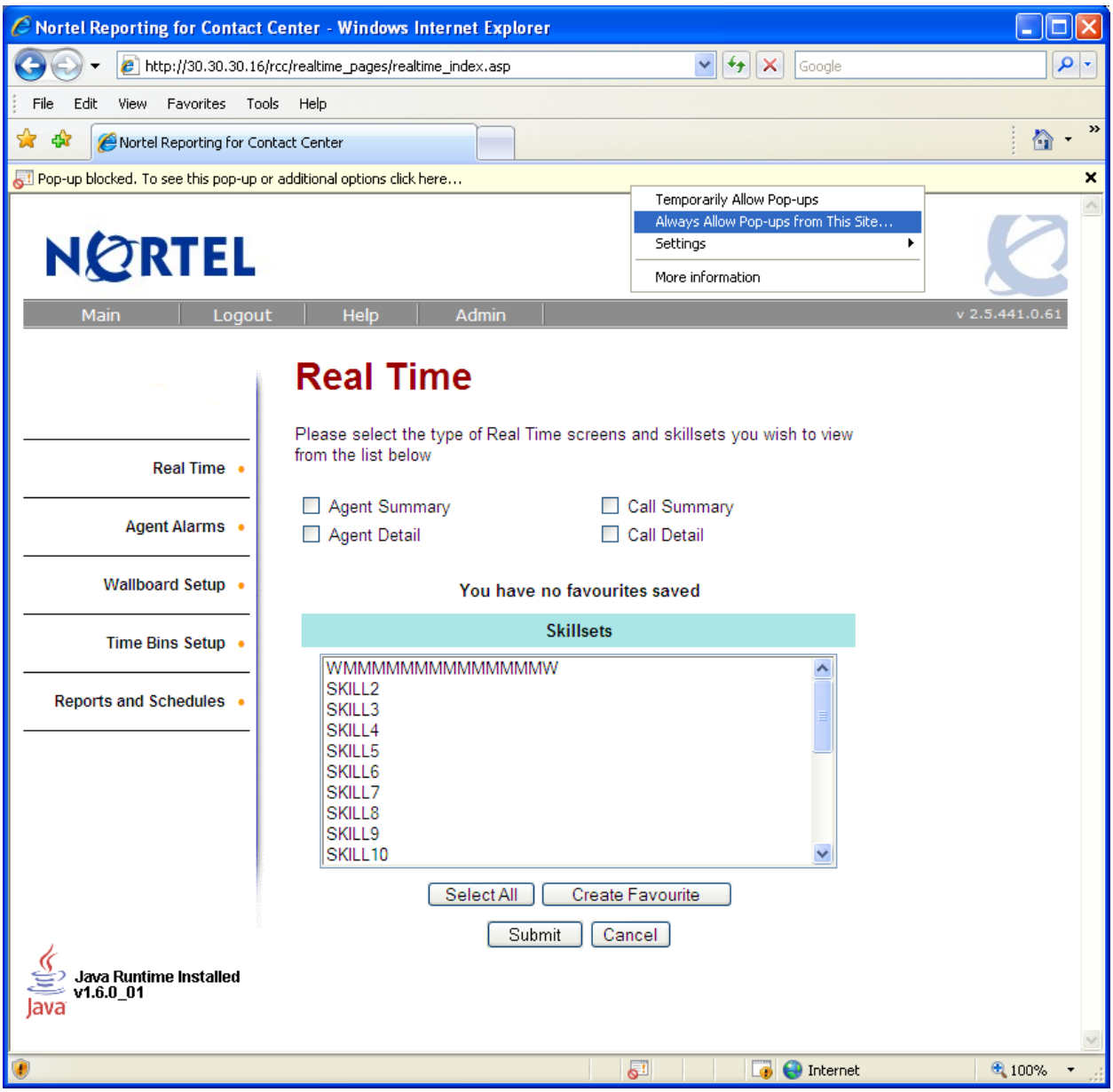


Figure 30: Pop-up options from information bar

2. A message box will be displayed to confirm allowing pop-ups from the Web Host PC, as shown in Figure 31: Allow Web site pop-up confirmation box.

   Click **Yes** to refresh the Real Time page.

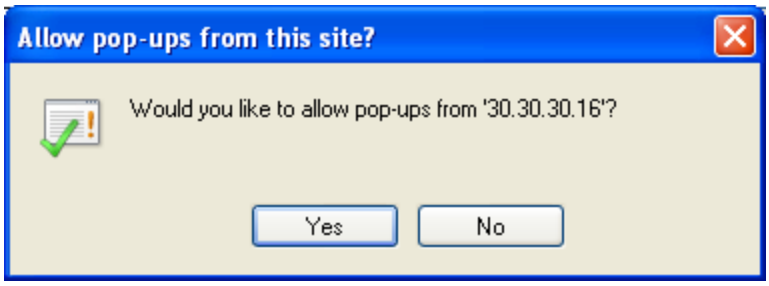


Figure 31: Allow Web site pop-up confirmation box

3. Select the Real Time screen check boxes to view again and click **Submit**. The Real Time screen should pop-up.

Page cannot be displayed message

If Internet Explorer 6 or above is being used to access Reporting for Contact Center Web pages and the message “Page cannot be displayed” is displayed in the browser window, friendly HTTP error messages may be enabled.

Internet Explorer friendly HTTP error messages mask the actual text of an HTTP 500 message that is sent to the browser. To disable friendly HTTP error messages, perform the following:

1. Click **Start**, then right-click the **Internet Explorer** icon, and select **Internet Properties**. See Figure 32: Internet Properties Dialog Box.

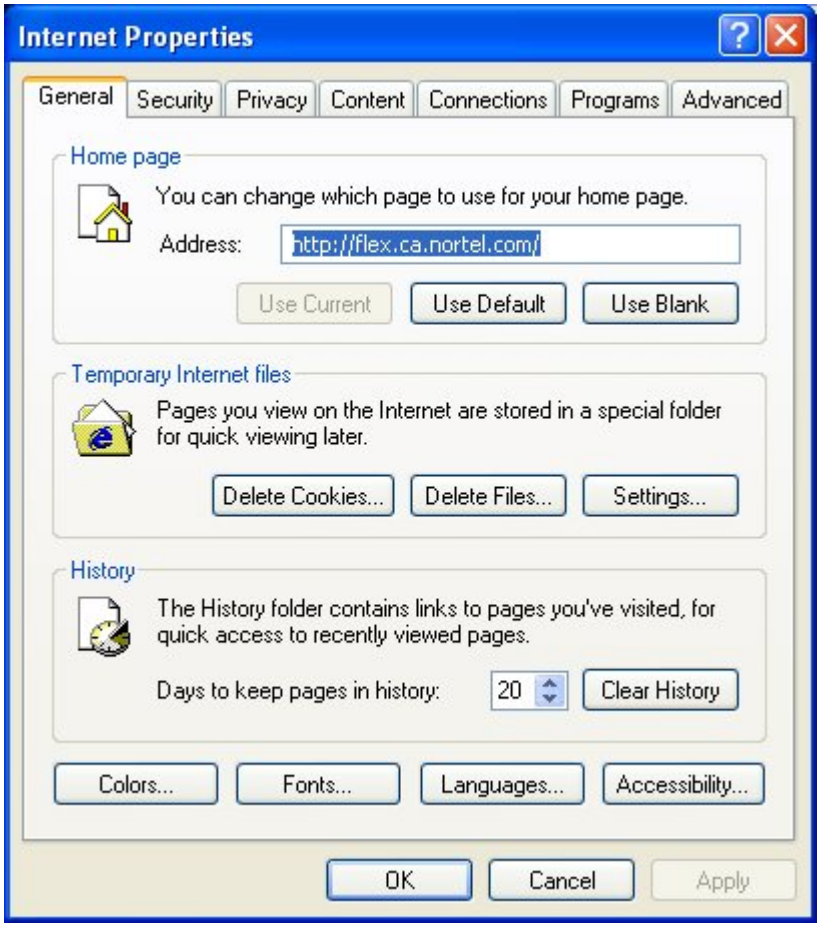


Figure 32: Internet Properties Dialog Box

Note: If you do not see the dialog box shown in Figure 32: Internet Properties Dialog Box, you have clicked a shortcut to Internet Explorer. You must click the Internet Explorer icon in the Start menu.

2. Click on the **Advanced** tab and under the Browsing section clear the **Show friendly HTTP error messages** check box. See Figure 33: Advanced window in Internet Properties.

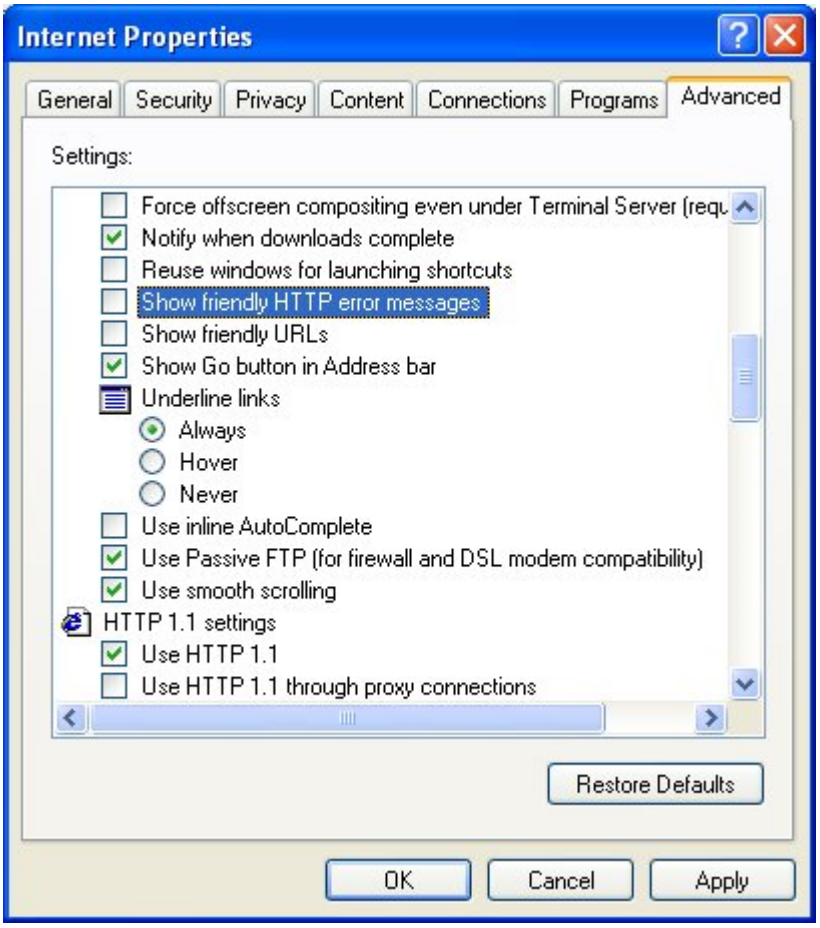


Figure 33: Advanced window in Internet Properties

3. Click **Apply** to accept the changes.
4. Click **OK** in the Internet Properties dialog box to close the dialog box.

Open a browser window to view Reporting for Contact Center.

Error on Closing Group of Internet Explorer Windows

If similar taskbar buttons are grouped together on the Windows taskbar, the User may encounter problems when closing multiple instances of Internet Explorer programs simultaneously, including Reporting for Contact Center, using the Close Group option.

> **Note:** To check that the Windows taskbar groups similar windows together, right-click on the taskbar and select **Properties**. The Taskbar and Start Menu Properties dialog box will open, see Figure 34: Taskbar Properties Dialog Box. Under Taskbar appearance, **Group similar taskbar buttons** will be checked.

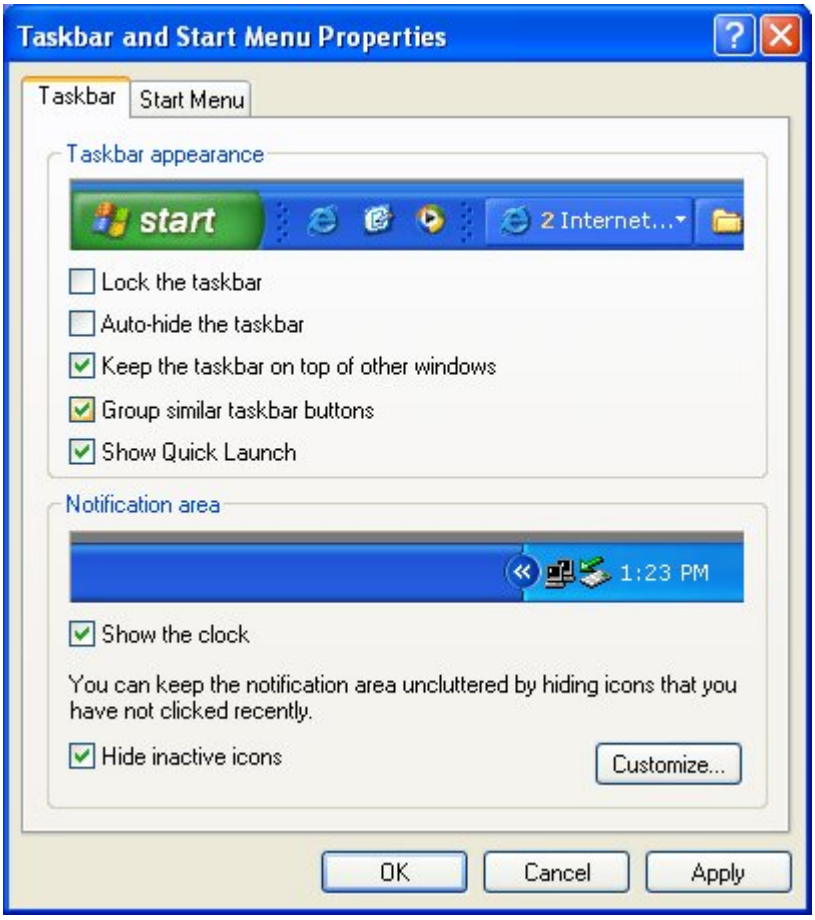


Figure 34: Taskbar Properties Dialog Box

If the Reporting for Contact Center window and other Reports are grouped together in an Internet Explorer taskbar button, right-clicking the **Internet Explorer** taskbar button and selecting **Close Group**, as shown in Figure 35: Selecting Close Group option from Internet Explorer Programs taskbar button, may cause an Internet Explorer problem.

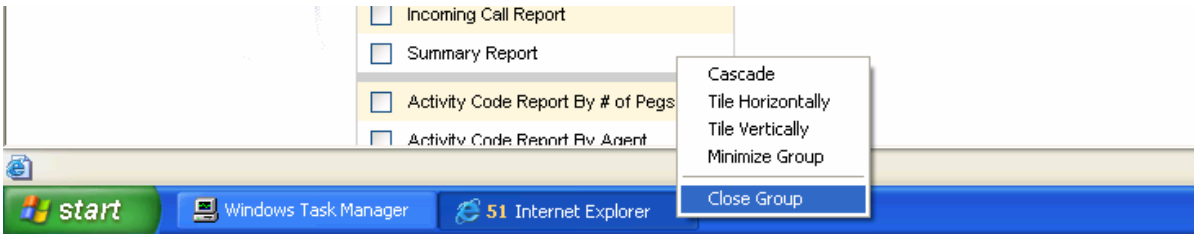


Figure 35: Selecting Close Group option from Internet Explorer Programs taskbar button

If Internet Explorer encounters problems an error message will be shown, as in Figure 36: Internet Explorer Close Group Error.

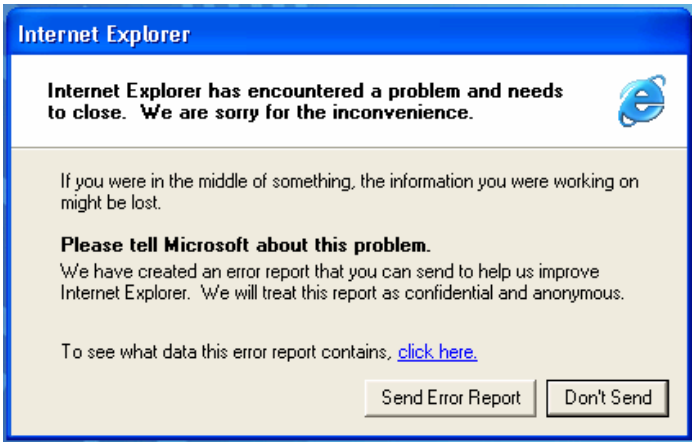

Internet Explorer
Internet Explorer has encountered a problem and needs to close. We are sorry for the inconvenience.
If you were in the middle of something, the information you were working on might be lost.
Please tell Microsoft about this problem.
We have created an error report that you can send to help us improve Internet Explorer. We will treat this report as confidential and anonymous.
To see what data this error report contains, click here.
Send Error Report
Don't Send

Figure 36: Internet Explorer Close Group Error

Click **Send Error Report** to close down all remaining open Internet Explorer windows. This will close Reporting for Contact Center and any Report Viewer windows that were open.

Real Time Viewer

Real Time screens and Java Runtime Environment on Client PCs

A Java Runtime Environment (JRE) should be automatically installed onto a Client PC, from the Web Host PC, the first time that the Real Time screens are viewed on the Client PC.

If the Java Runtime is not launched automatically, you will not be able to view the Real Time screens. A warning message will be displayed near the top of the Real Time page in red bold font and the **Submit** button will appear disabled, as shown in Figure 37: JRE installation message:

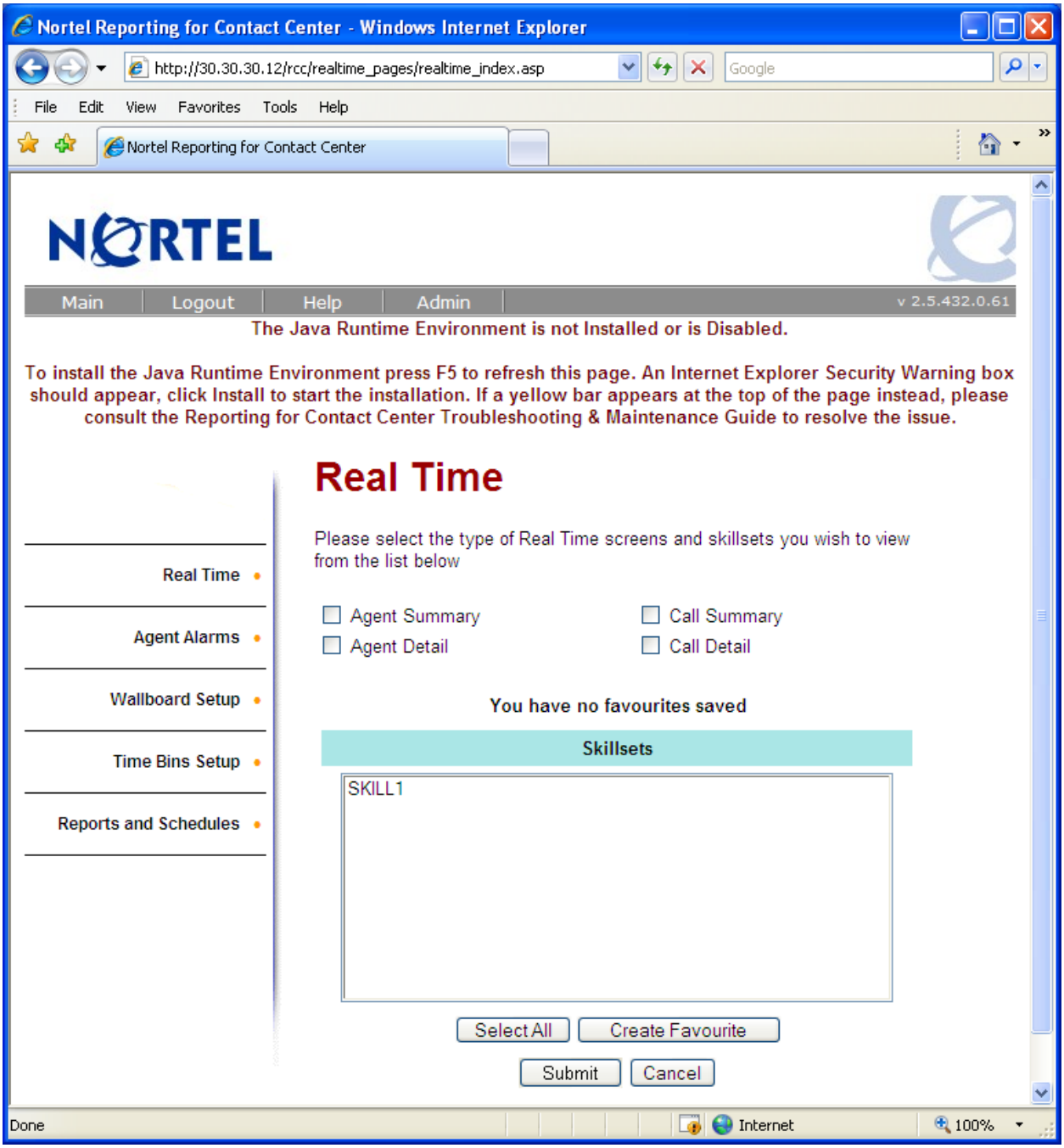

Nortel Reporting for Contact Center - Windows Internet Explorer
http://30.30.30.12/rcc/realtime_pages/realtime_index.asp
File Edit View Favorites Tools Help
Nortel Reporting for Contact Center
NORTEL
Main Logout Help Admin v 2.5.432.0.61
The Java Runtime Environment is not Installed or is Disabled.
To install the Java Runtime Environment press F5 to refresh this page. An Internet Explorer Security Warning box should appear, click Install to start the installation. If a yellow bar appears at the top of the page instead, please consult the Reporting for Contact Center Troubleshooting & Maintenance Guide to resolve the issue.
Real Time
Please select the type of Real Time screens and skillsets you wish to view from the list below
Real Time
Agent Alarms
Wallboard Setup
Time Bins Setup
Reports and Schedules
Agent Summary
Call Summary
Agent Detail
Call Detail
You have no favourites saved
Skillsets
SKILL1
Select All
Create Favourite
Submit
Cancel
Done
Internet
100%

Figure 37: JRE installation message

Manual installation of Java Runtime Environment

To install the JRE perform the following steps:

1. Press **F5** to refresh the page.

2. If the Internet Explorer Security Warning window appears, as shown in Figure 38: Internet Explorer Security Warning window, click **Install**. Go to step 11.

Internet Explorer - Security Warning
Do you want to install this software?
Name: Java(TM) SE Runtime Environment 6.0
Publisher: Sun Microsystems, Inc.
More options
Install
Don't Install
While files from the Internet can be useful, this file type can potentially harm your computer. Only install software from publishers you trust. What's the risk?

Figure 38: Internet Explorer Security Warning window

If the Internet Explorer Security Warning box does not appear, a yellow Information Bar will appear just above the Nortel logo, as shown in Figure 39: ActiveX control message in Information Bar.

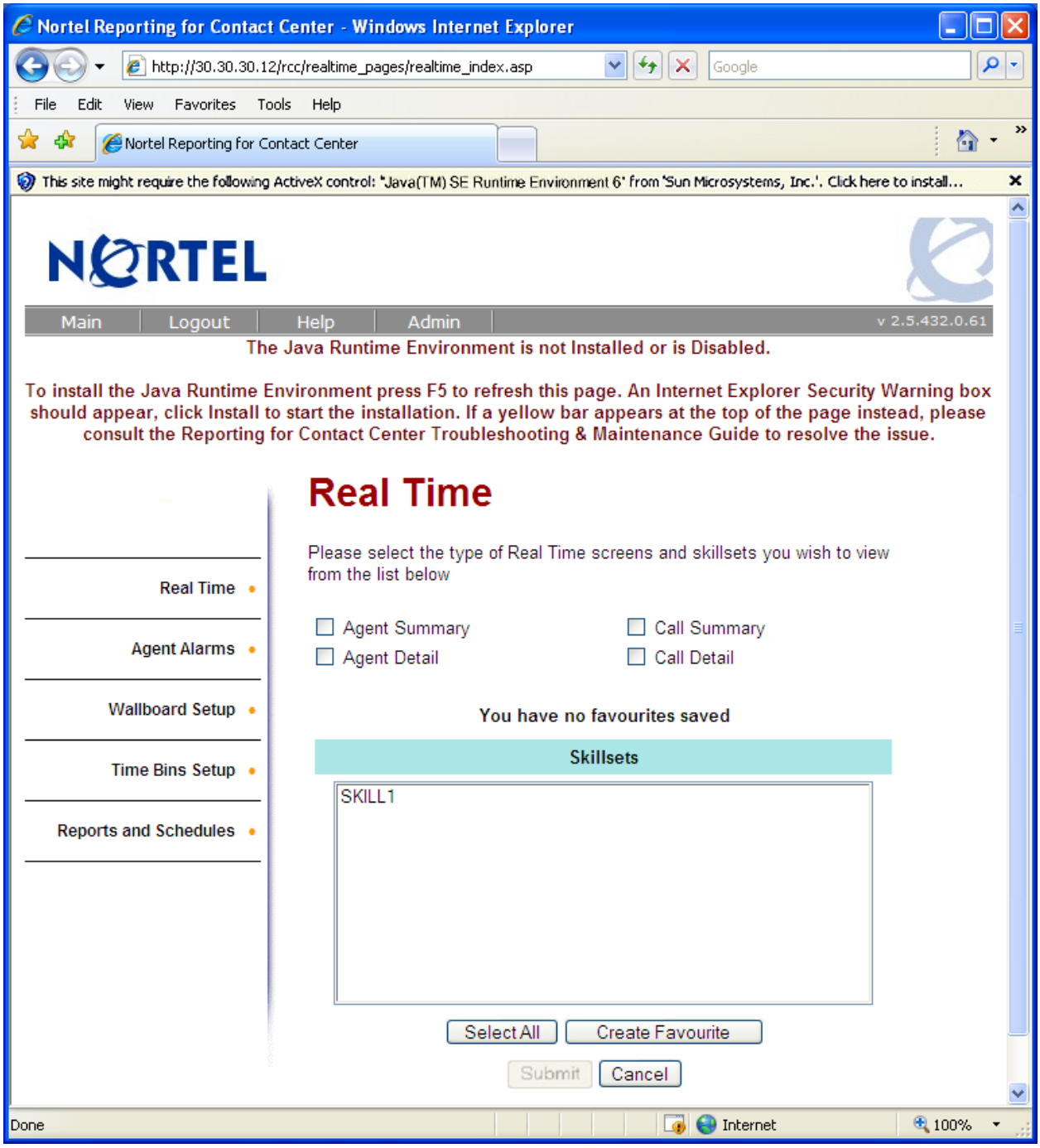

Nortel Reporting for Contact Center - Windows Internet Explorer
http://30.30.30.12/rcc/realtime_pages/realtime_index.asp
File Edit View Favorites Tools Help
Nortel Reporting for Contact Center
This site might require the following ActiveX control: 'Java(TM) SE Runtime Environment 6' from 'Sun Microsystems, Inc.'. Click here to install...
NORTEL
Main Logout Help Admin v 2.5.432.0.61
The Java Runtime Environment is not Installed or is Disabled.
To install the Java Runtime Environment press F5 to refresh this page. An Internet Explorer Security Warning box should appear, click Install to start the installation. If a yellow bar appears at the top of the page instead, please consult the Reporting for Contact Center Troubleshooting & Maintenance Guide to resolve the issue.
Real Time
Please select the type of Real Time screens and skillsets you wish to view from the list below
Agent Summary
Call Summary
Agent Detail
Call Detail
You have no favourites saved
Skillsets
SKILL1
Real Time
Agent Alarms
Wallboard Setup
Time Bins Setup
Reports and Schedules
Select All
Create Favourite
Submit
Cancel
Done
Internet
100%

Figure 39: ActiveX control message in Information Bar

3. There are 2 messages that can be displayed in the Information Bar as follows:

   Message 1:
   "This site might require the following ActiveX control: ' Java(TM) SE Runtime Environment 6' from 'Sun Microsystems Inc.'. Click here to install…"

If the Information Bar displays Message 1, or another release version of Java Runtime Environment 6, perform the following:

i. Click on the Information Bar and click on **Install ActiveX Control**.

ii. An Internet Explorer - Security Warning window will appear, see Figure 38: Internet Explorer Security Warning window. Click **Install** to install the latest version of Java Runtime Environment 6.

Message 2:
"Your security settings do not allow Web sites to use ActiveX controls installed on your computer. The page may not display correctly. Click here for options…"

If the Information Bar displays Message 2 or any other similarly worded message, your security settings will have to be adjusted to allow the Java Runtime Environment to be downloaded onto the Client PC. Refer to Internet Explorer security settings on page 90.

4. The installation of JRE will commence through an Installation Wizard.

5. From the License Agreement window, select the setup check box **Typical setup – All recommended features will be installed**. See Figure 40: JRE License Agreement and setup type window.

   Click **Accept**.

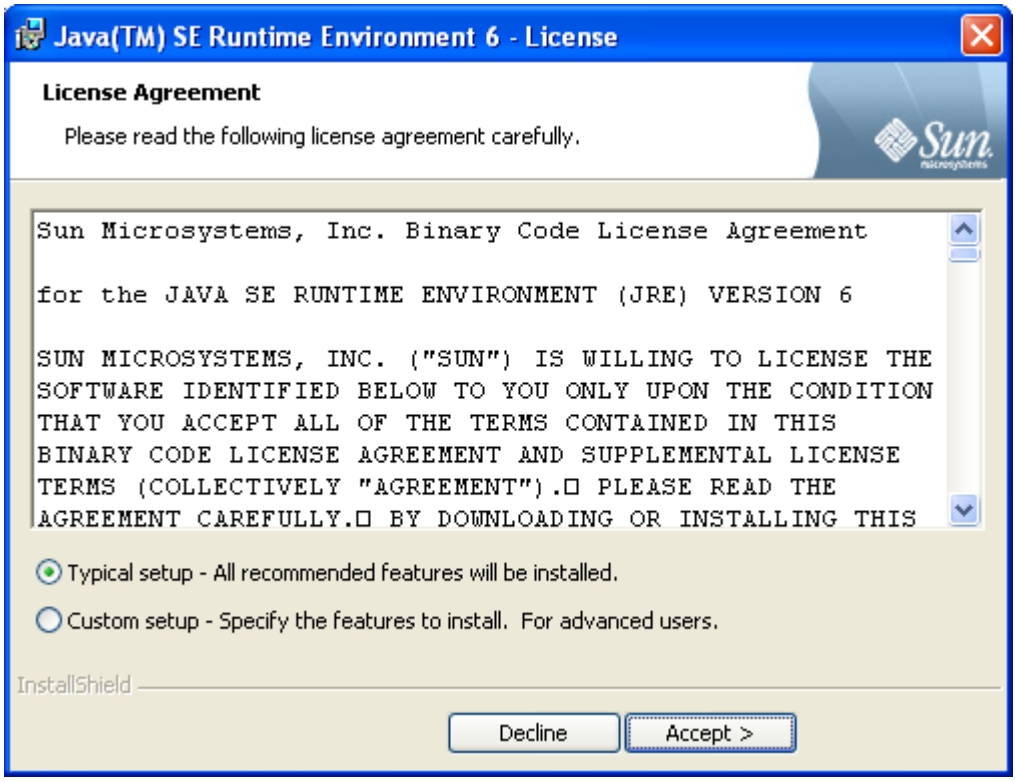

Java(TM) SE Runtime Environment 6 - License
License Agreement
Please read the following license agreement carefully.
Sun
Sun Microsystems, Inc. Binary Code License Agreement
for the JAVA SE RUNTIME ENVIRONMENT (JRE) VERSION 6
SUN MICROSYSTEMS, INC. ("SUN") IS WILLING TO LICENSE THE SOFTWARE IDENTIFIED BELOW TO YOU ONLY UPON THE CONDITION THAT YOU ACCEPT ALL OF THE TERMS CONTAINED IN THIS BINARY CODE LICENSE AGREEMENT AND SUPPLEMENTAL LICENSE TERMS (COLLECTIVELY "AGREEMENT").□ PLEASE READ THE AGREEMENT CAREFULLY.□ BY DOWNLOADING OR INSTALLING THIS
Typical setup - All recommended features will be installed.
Custom setup - Specify the features to install. For advanced users.
InstallShield
Decline
Accept >

Figure 40: JRE License Agreement and setup type window

The Installation Wizard will install Java SE Runtime Environment 6 with the latest release version.

6. When the installation is complete the Installation Completed window will be displayed, as shown in Figure 41: JRE Complete window.

   Click **Finish**.

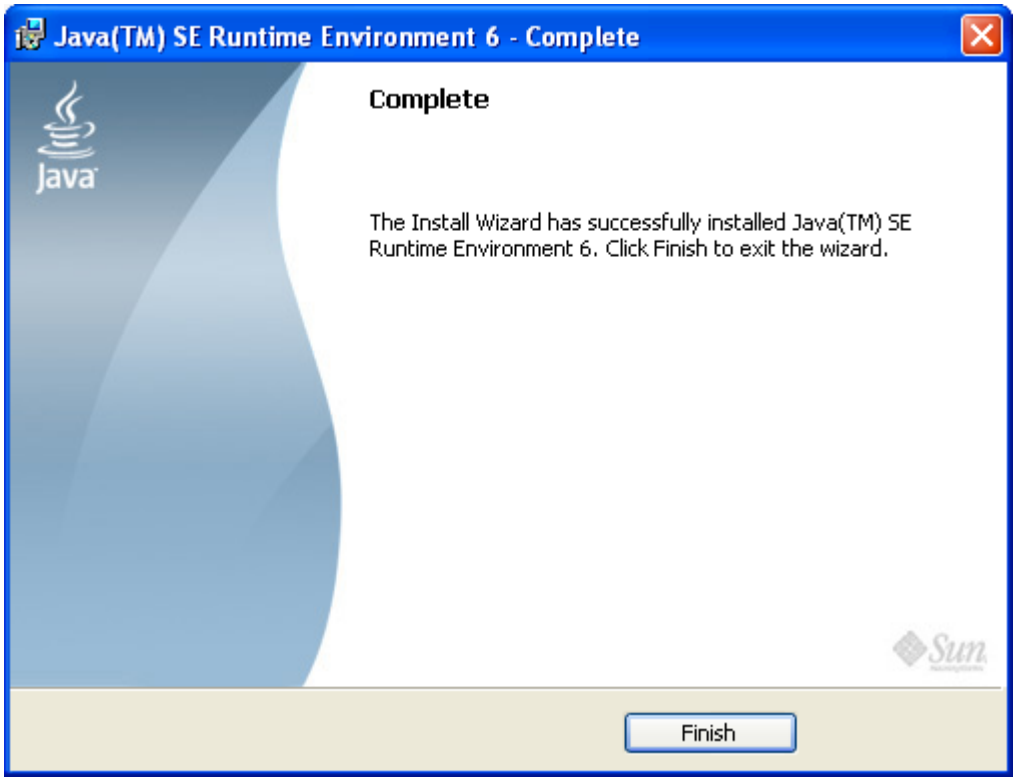

Java(TM) SE Runtime Environment 6 - Complete
Complete
The Install Wizard has successfully installed Java(TM) SE Runtime Environment 6. Click Finish to exit the wizard.
Java
Sun
Finish

Figure 41: JRE Complete window

JRE will now be installed on the Client PC.

The Real Time page will display the Java Runtime Environment applet logo along with the version of JRE installed, as shown in Figure 42: JRE applet logo on Real Time page. If the JRE applet logo does not display the installed version of JRE, close and open a new Internet Explorer browser window and log back on to Reporting for Contact Center. Navigate to the Real Time page again.

The **Submit** button will now be enabled to allow the user to open up Real Time screens to view.

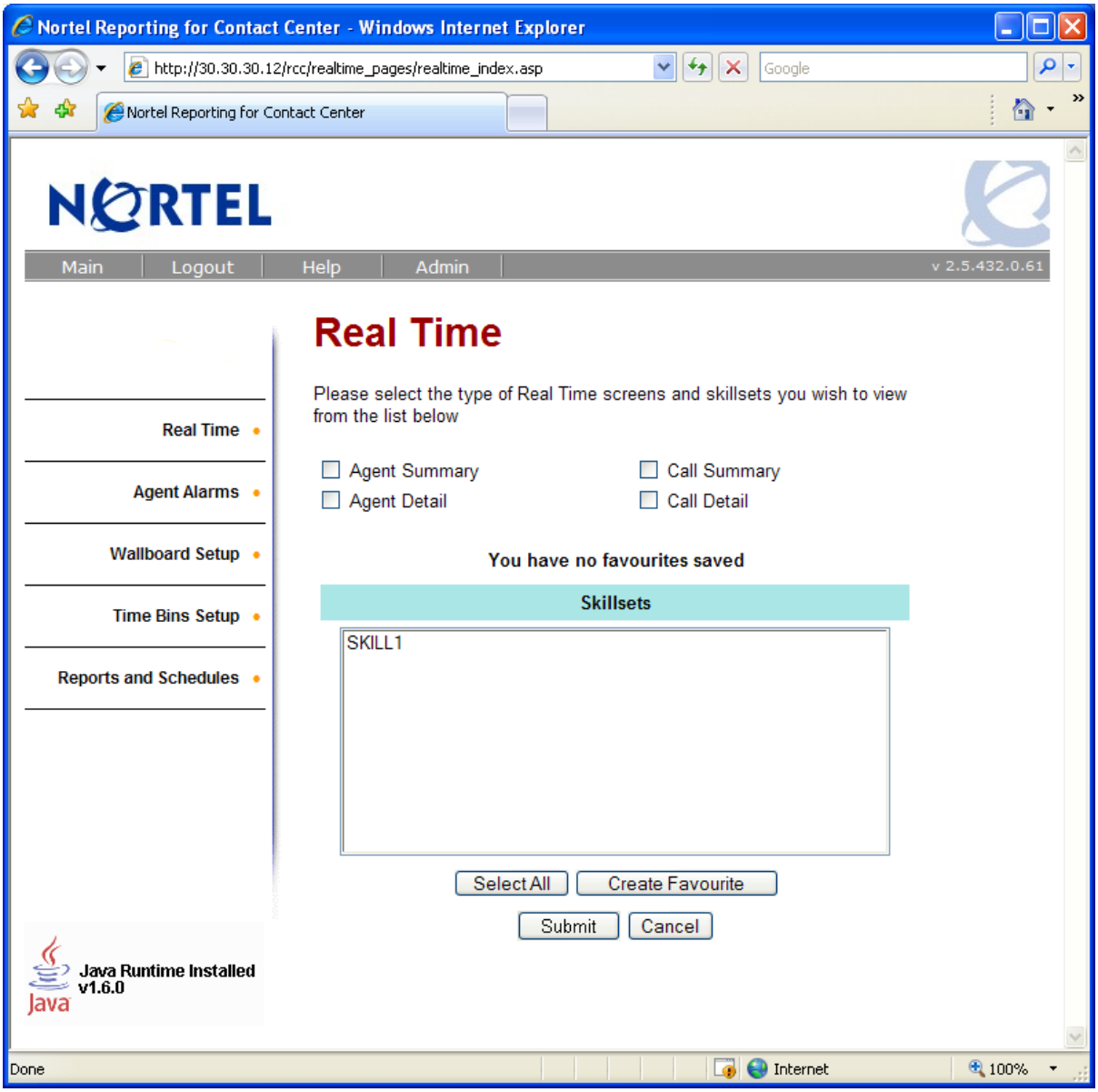


Figure 42: JRE applet logo on Real Time page

Alternative method to a manual installation of Java Runtime Environment

If the JRE still can not install, start the installation by the following:

1. On the Web Host PC in C:\Program Files\Nortel\Reporting for Contact Center\Java folder locate the file **jre-6-windows-i586.exe**.
2. Copy this file to the Client PC and execute there.

This will install the JRE.

If further assistance is required on installing JRE, contact your support personnel.

Unable to print reports

If a Client PC with limited PC user rights attempts to print a report for the first time a warning messsage may be displayed, as shown in Figure 43: Print warning message.

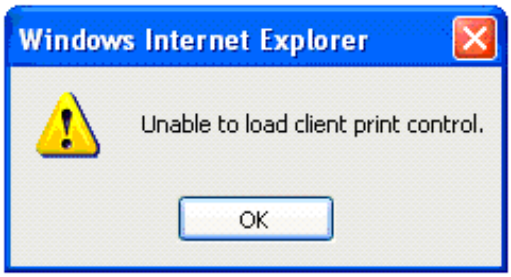


Figure 43: Print warning message

The warning message displayed is due to an ActiveX control that cannot be installed. Perform the following steps to install the ActiveX component:

1. Either contact your system administrator to log on to the PC, or log on with adminstrator rights.
2. Log on to RCC and from the Reports and Schedules page select a report.
3. Click **View** to open the Report Viewer window.
4. Click the **Print** icon. The warning message, as shown in Figure 43: Print warning message, will appear along with an Information bar in the Report Viewer window. See Figure 44: MS SQL Server add-on in Information bar.

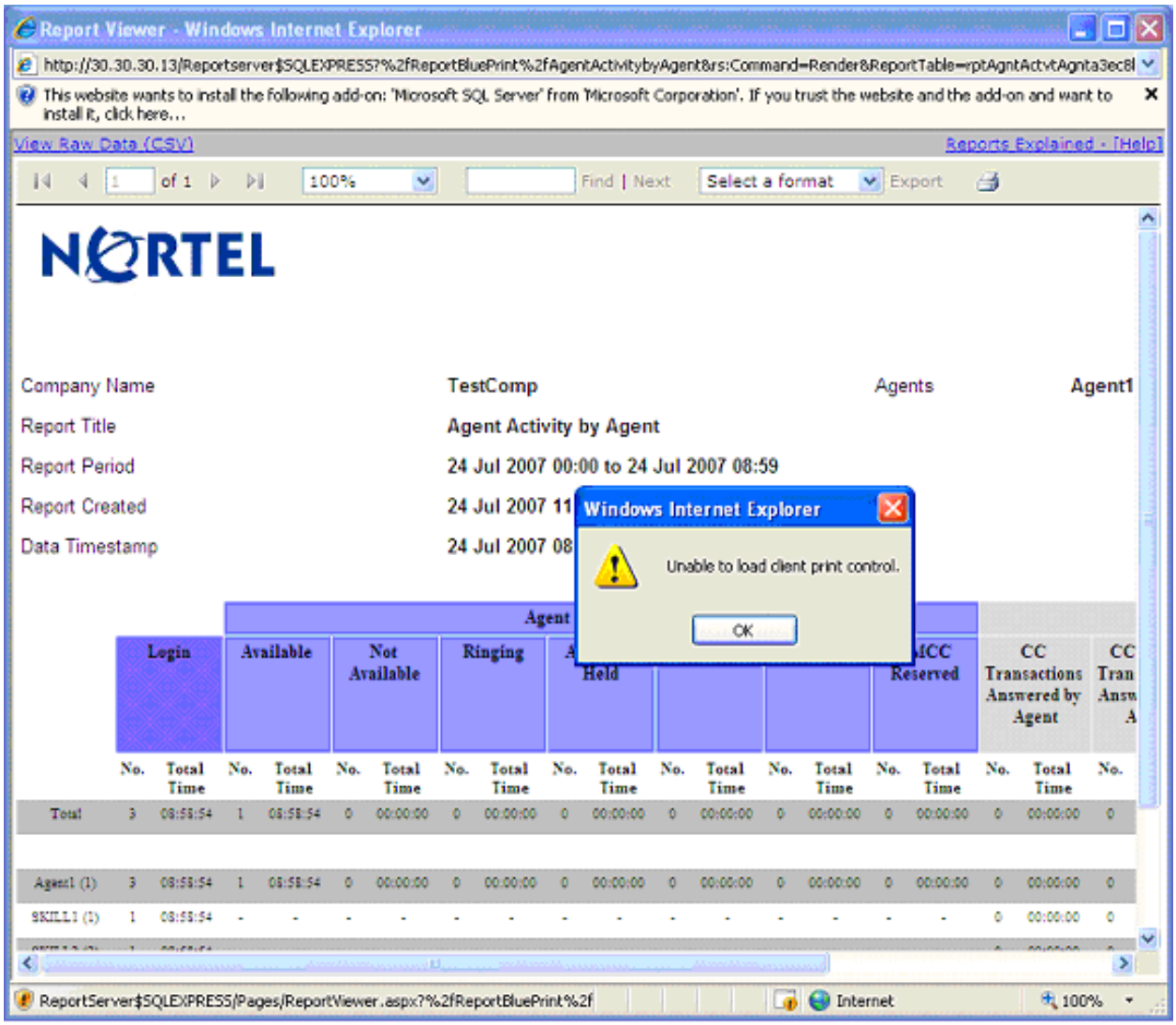


Figure 44: MS SQL Server add-on in Information bar

5. Click on the Information bar and select the install option. The report will be regenerated.
6. Click the **Print** icon again. An Internet Explorer Security Warning window will appear, as shown in Figure 45: MS SQL Server installation window.

Internet Explorer - Security Warning
Do you want to install this software?
Name: Microsoft SQL Server
Publisher: Microsoft Corporation
More options
Install
Don't Install
While files from the Internet can be useful, this file type can potentially harm your computer. Only install software from publishers you trust. What's the risk?

Figure 45: MS SQL Server installation window

7. Click **Install** to install the ActiveX component.

You should now be able to log on to the PC as normal and access RCC to print reports.

BCM and CCRS Troubleshooting 8

This section details how to troubleshoot problems that occur on the Business Communications Manager (BCM).

Pinging the BCM / Contact Center

To test that the BCM is accessible from the Web Host PC over the network, ping to the BCM by the following:

1. Open a Command Prompt window by clicking **Start** > **Run**, type **cmd** and press **Enter**.
2. Type **Ping [BCM IP Address or Host Name]**.
3. Press **Enter**.

A successful ping will show statistics of request packets sent to the target host and packets received, as shown in Figure 46: Successful ping response to Web Host PC.

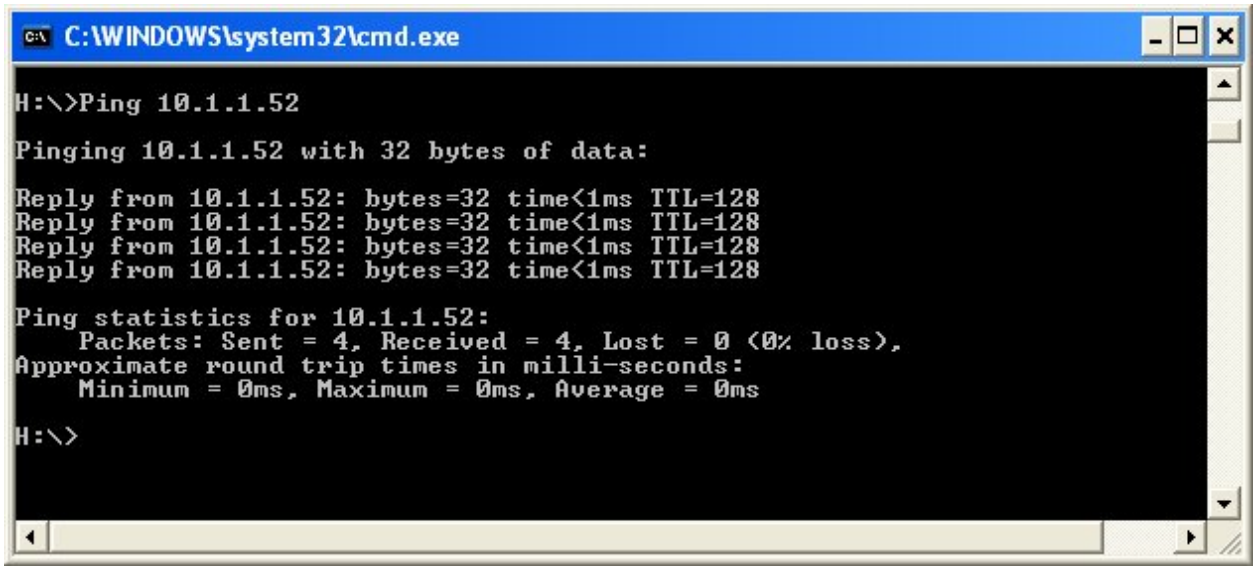


Figure 46: Successful ping response to Web Host PC

If the user does not receive response packets back from the BCM, there is pinging failure, see the section Resolving pinging failure on your network, page 110.

Resolving pinging failure on your network

If there is pinging failure to the BCM, an error message will be seen in the Command Prompt window after attempting to ping to the BCM. The user should resolve this with the network administrator.

The error messages shown on attempting to ping the BCM can be one of the following:

- **Request timed out** - The IP address is valid, but there is no reply from it. The most likely cause is a network firewall or a third party software firewall program on the Web Host PC is blocking the ping request.
- **Unknown host <name>** or **Ping request could not find host <name>** - The computer name does not exist on the local area network. Ensure that the NetBIOS over TCP/IP is enabled.
- **Destination host unreachable** – The IP address is not on a local area network, and the default gateway can not access it. Either there is no default gateway set up, the address is wrong, or it is not functioning.

Checking XML from the Contact Center

A User may be required to retrieve XML data from the Contact Center for verification purposes, such as for:

- Connection to the Contact Center;
- Acceptance of the CCRS password by the Contact Center;
- Response from the Contact Center;
- Immediate view of any Contact Center errors, such as InvalidPassword, see Contact Center errors on page 114; or
- Invalid XML. See Invalid XML on page 115 for symptoms of invalid XML data from the Contact Center.

CCRS Test Page

To retrieve XML data from the Contact Center the User must execute the CCRS Test page, as follows:

1. In the browser Address bar enter the location: http://localhost/rcc/ccrstest.htm from the Web Host PC, or: http://[Web Host IP Address]/rcc/ccrstest.htm from a Client PC.
2. The CCRS Test page opens up, see Figure 47: CCRS Test page.

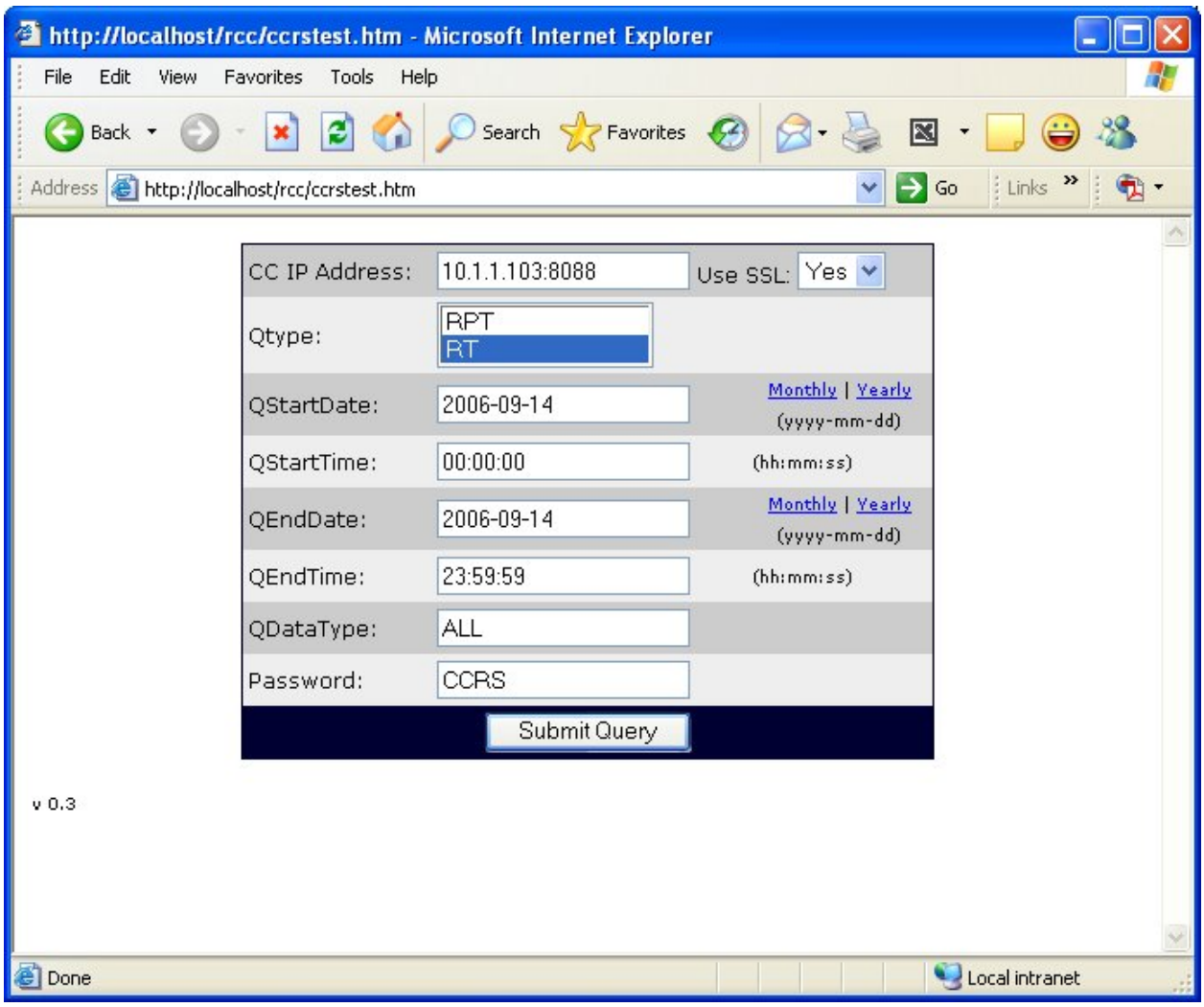


Figure 47: CCRS Test page

3. For BCM 4.0 and BCM50 3.0: ensure that the port number to the Contact Center Reporting Server in the Contact Center is entered after the IP Address of the BCM in the **CC IP Address** field, in the format [IP Address]:8088.

   For BCM50 2.0: in the **CC IP Address** field, ensure that the IP Address of the PC with the Contact Center Reporting Server installed is entered with port number **8088** following it. The format should be [IP Address]:8088.

4. Select **Yes** in the SSL field for a secure connection to the Contact Center.

5. To get Historical XML data from the Contact Center, select **RPT** from the Qtype field. To get Real Time data, select **RT** in the Qtype field.

6. Leave the date and time fields blank if requesting Real Time XML data from the Contact Center. If requesting Historical XML data, specify dates and times, making sure that the times entered are equal to or less than 3 hours. This is because the Contact Center returns XML data requests in no more than 3 hourly packets of data. An example of acceptable

date and time values is given in Table 4: A sample of acceptable date and times for requesting historical XML data as follows:

QStartDate	QStartTime	QEndDate	QEndTime
2006-09-14	12:00:00	2006-09-14	15:00:00

Table 4: A sample of acceptable date and times for requesting historical XML data

7. Enter the CCRS password in the **CCRS** field.
8. Click **Submit Query** to get XML data from the BCM. See Figure 48: XML data from the BCM.

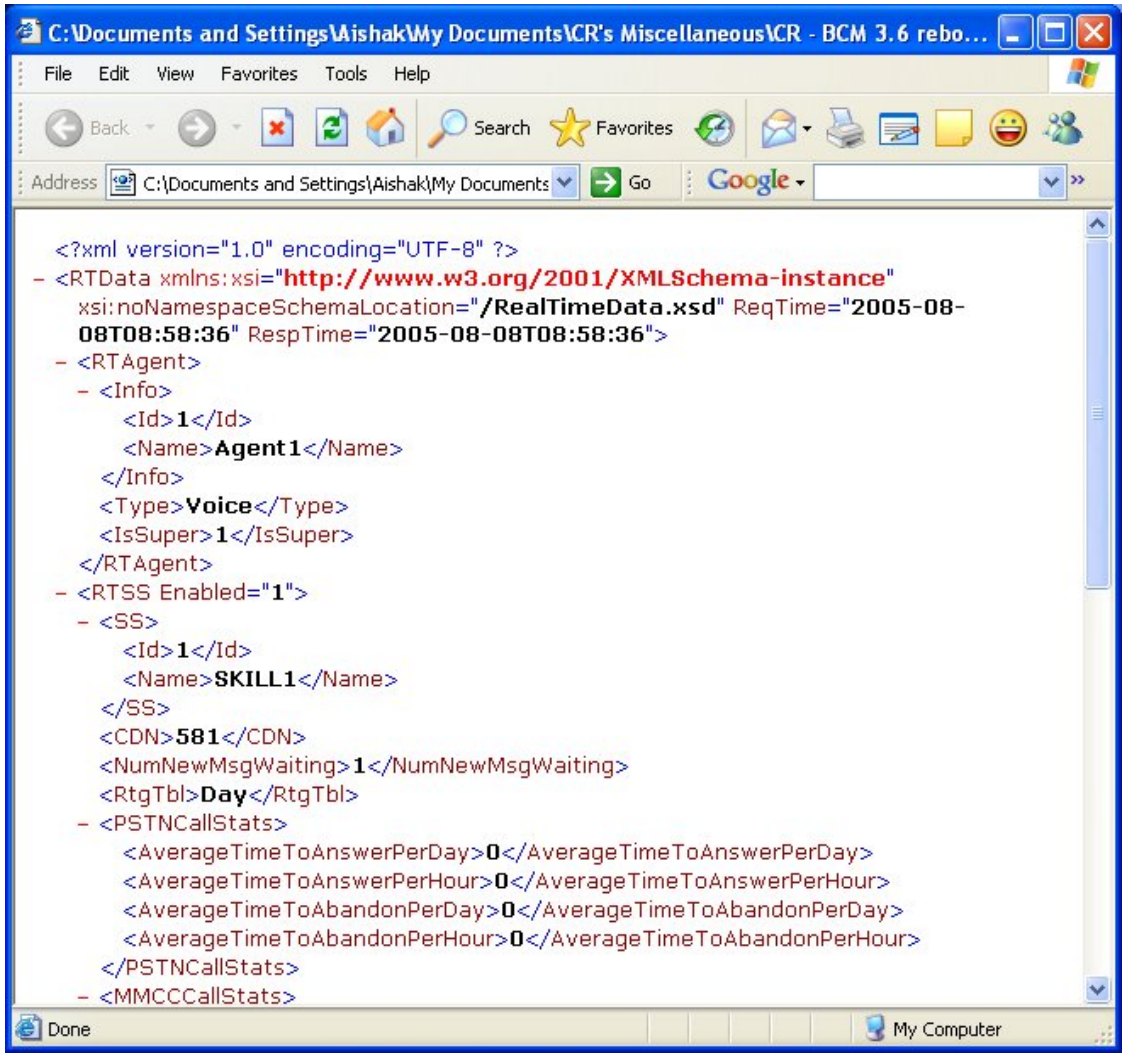


Figure 48: XML data from the BCM

Contact Center errors

On executing the CCRS Test page (see CCRS Test Page on page 117 for instructions on executing the CCRS Test page) certain error conditions in the Contact Center may return a special message through the XML rather than in the Historical or Real Time data. If this occurs, a screen similar to Figure 49: InvalidPassword XML error in CCRS Test page will be seen as follows:

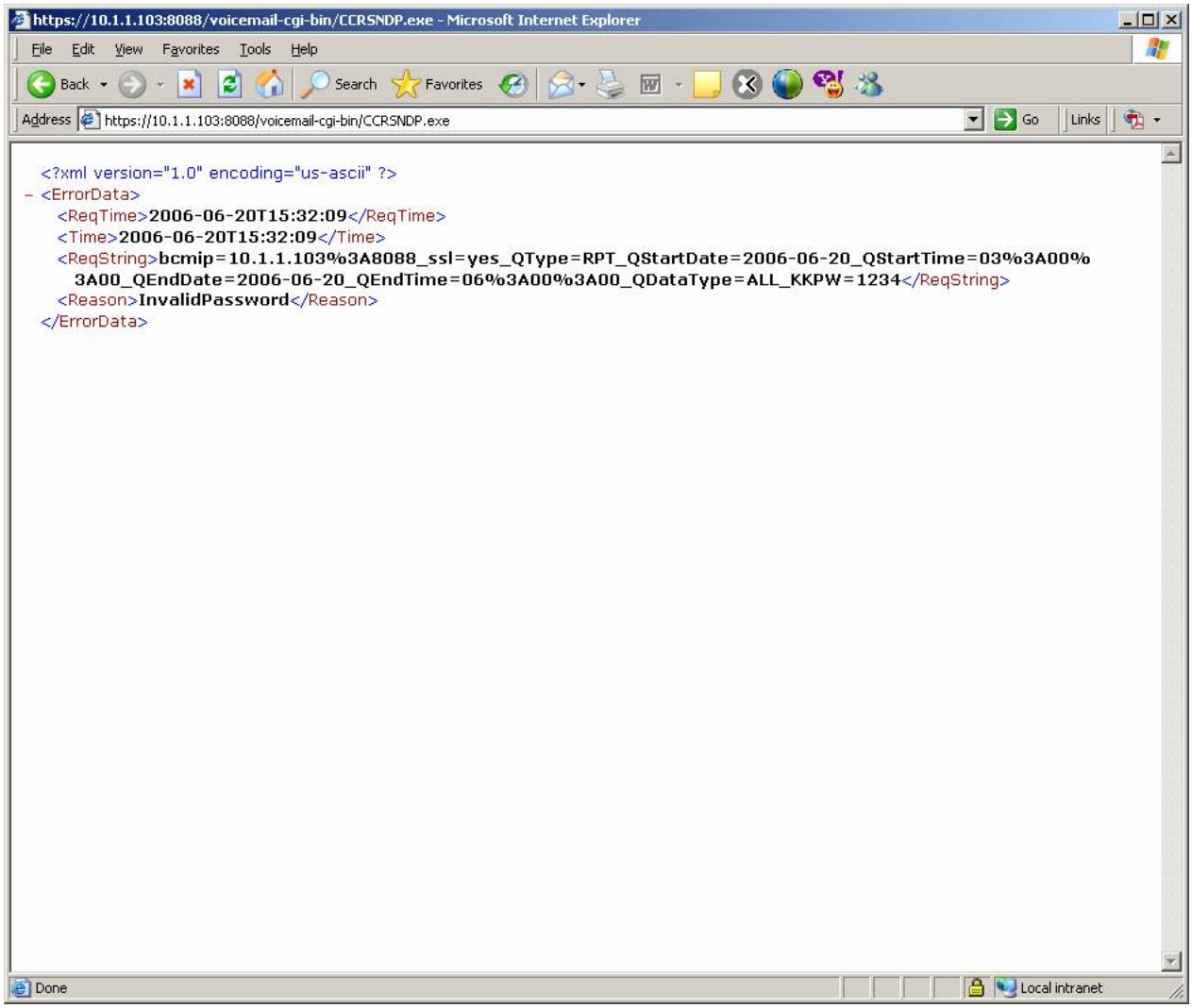


Figure 49: InvalidPassword XML error in CCRS Test page

The XML elements that appear in an XML error in the CCRS Test page are as follows:

- **ReqTime** is a standard field displaying the time that the request was sent to the Contact Center;
- **Time** is the current time in the Contact Center;
- **ReqString** is the information sent to the Contact Center by the CCRS Test page;

- **Reason** is the reason why the XML error occurred.

  In the XML error example in Figure 49: InvalidPassword XML error in CCRS Test page, the reason given is **InvalidPassword** indicating that the password used in the CCRS Test page is incorrect. A full list of the XML errors that can be displayed are as follows:

  - **InvalidRequest** – The request from the client application is not valid.
  - **VMServiceNotRunning** – The Voicemail service is not running on the BCM or Call Pilot.
  - **InvalidPassword** – The password used by the client application is not valid.
  - **NoKeyCode** – The keycode used to turn on the CCRS data stream is not present.
  - **NoCCData** – No data is present in the CCRSAppServer database. Configure at least one skillset in CallPilot Manager.
  - **NoCCKeyCode** – The keycode used to enable the Contact Center application is not present.
  - **CCRSDisabled** – The CCRS data stream is disabled.
  - **ServerBusy** – The server is too busy to handle the request (too many simultaneous users).
  - **CDNConflict** – There is a CDN conflict in the Skillset and CDN identified in the error message.
  - **CannotConnectToCC** – The CCRS cannot contact the Contact Center.
  - **CannotConnectToDB** – Could not connect to the database in the Contact Center.
  - **CCRefusedConnection** – Indicates that the Contact Center refused to register the AppServer.
  - **HistoricalReqOver3Hours** – The request from the client application is not valid (exceeds three hours).
  - **UnknownServerError** – None of the above.

Invalid XML

An error message appears in Reporting for Contact Center if invalid XML data is received by the Reporting for Contact Center Reporting Service, as shown in Figure 50: Invalid XML data error message.

Perform the following steps to bypass invalid XML from the Contact Center:

> **Note:** The Reporting Service gets XML from the Contact Center on initial download of data from the Contact Center and then every 15 minutes.

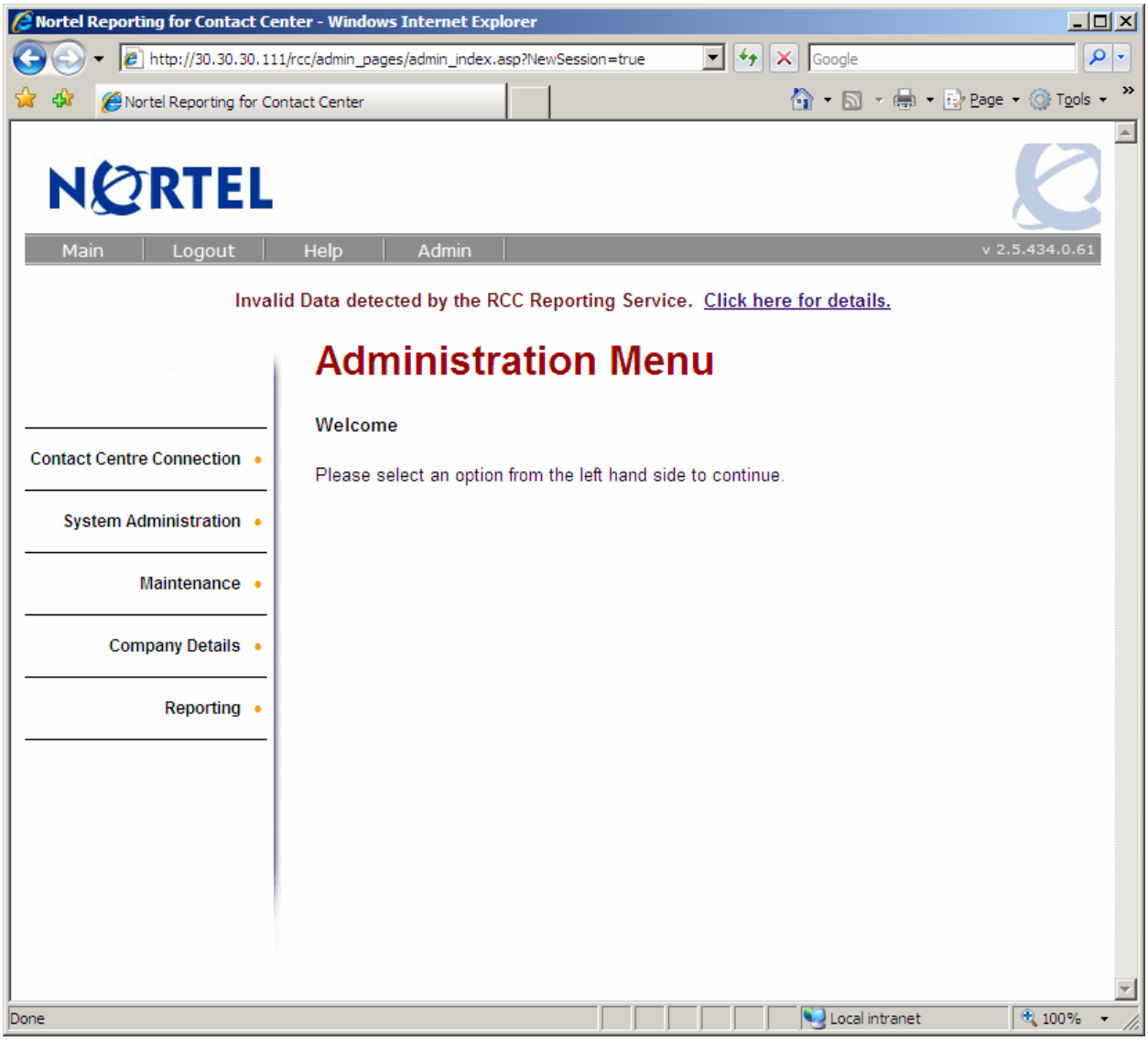


Figure 50: Invalid XML data error message

1. Click the **Click here for details** link to view information about the invalid XML data.

Note: Only the Administrator can see the link Click here for details.

2. The ERROR! Invalid Data Detected page appears, see Figure 51: ERROR! Invalid Data Detected page. Here the Administrator can see when the invalid chunk of XML data occurred.

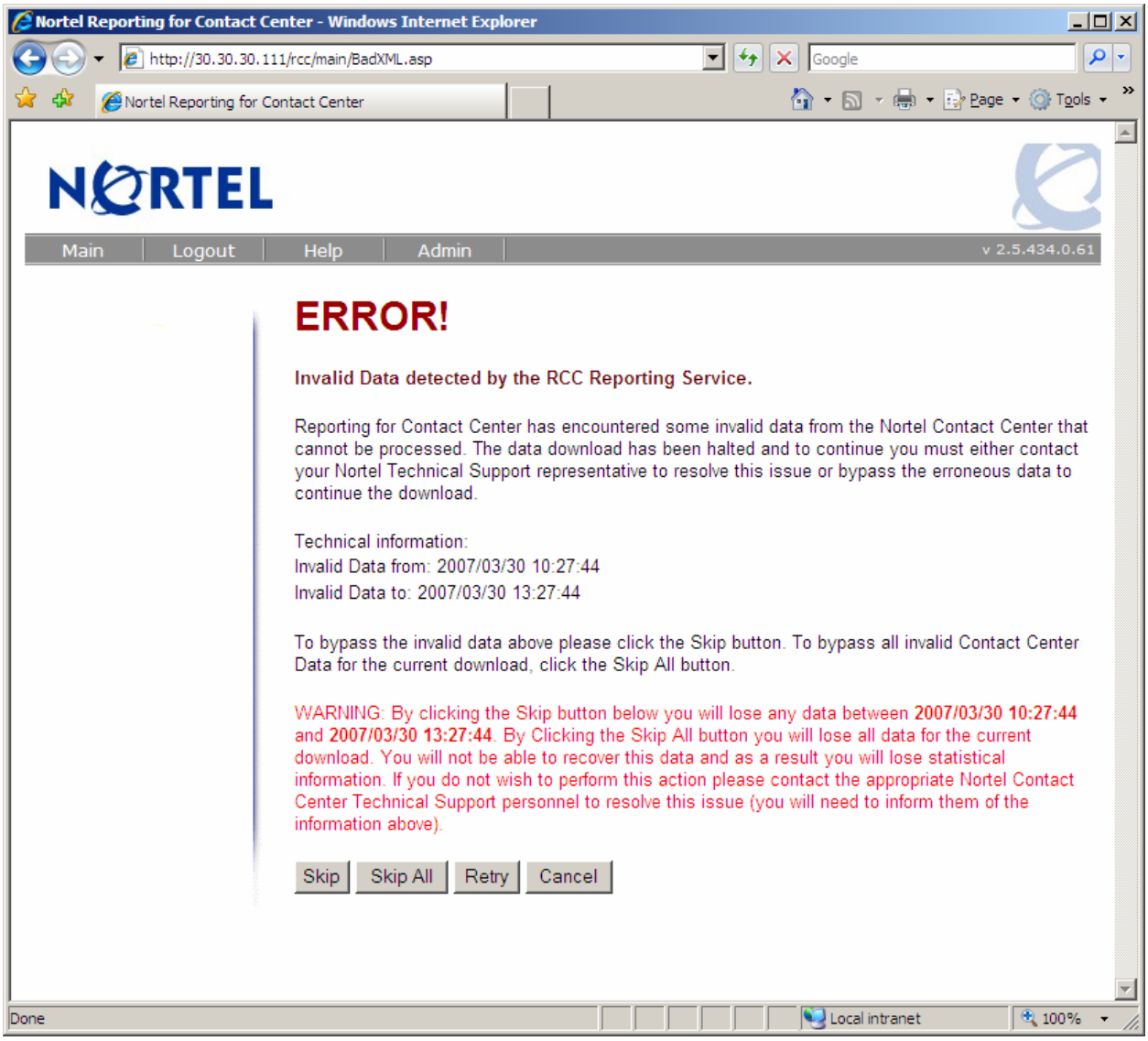

Nortel Reporting for Contact Center - Windows Internet Explorer
http://30.30.30.111/rcc/main/BadXML.asp
Nortel Reporting for Contact Center
NORTEL
Main
Logout
Help
Admin
v 2.5.434.0.61
ERROR!
Invalid Data detected by the RCC Reporting Service.
Reporting for Contact Center has encountered some invalid data from the Nortel Contact Center that cannot be processed. The data download has been halted and to continue you must either contact your Nortel Technical Support representative to resolve this issue or bypass the erroneous data to continue the download.
Technical information:
Invalid Data from: 2007/03/30 10:27:44
Invalid Data to: 2007/03/30 13:27:44
To bypass the invalid data above please click the Skip button. To bypass all invalid Contact Center Data for the current download, click the Skip All button.
WARNING: By clicking the Skip button below you will lose any data between 2007/03/30 10:27:44 and 2007/03/30 13:27:44. By Clicking the Skip All button you will lose all data for the current download. You will not be able to recover this data and as a result you will lose statistical information. If you do not wish to perform this action please contact the appropriate Nortel Contact Center Technical Support personnel to resolve this issue (you will need to inform them of the information above).
Skip
Skip All
Retry
Cancel
Done
Local intranet
100%

Figure 51: ERROR! Invalid Data Detected page

3. The Administrator can click **Skip** to process XML data from the Contact Center but bypassing the erroneous invalid chunk of XML. Clicking **Skip All** will bypass all invalid XML data from an initial download from the Contact Center. **Retry** will retry the same request again and **Cancel** will not process any XML and return the Administrator back to their previous page.

Incompatible XML

The voice mail version on CC is strongly linked to the RCC version. XML incompatibility occurs when the Reporting for Contact Center client application has a different schema version to that of the XML schema in the Contact Center (that is, incompatible version between the RCC receiving XML and the BCM sending XML). If this occurs, an incompatible XML schema

message will be displayed on the Reporting for Contact Center browser interface, as shown in Figure 52: Incompatible schema version between RCC and XML.

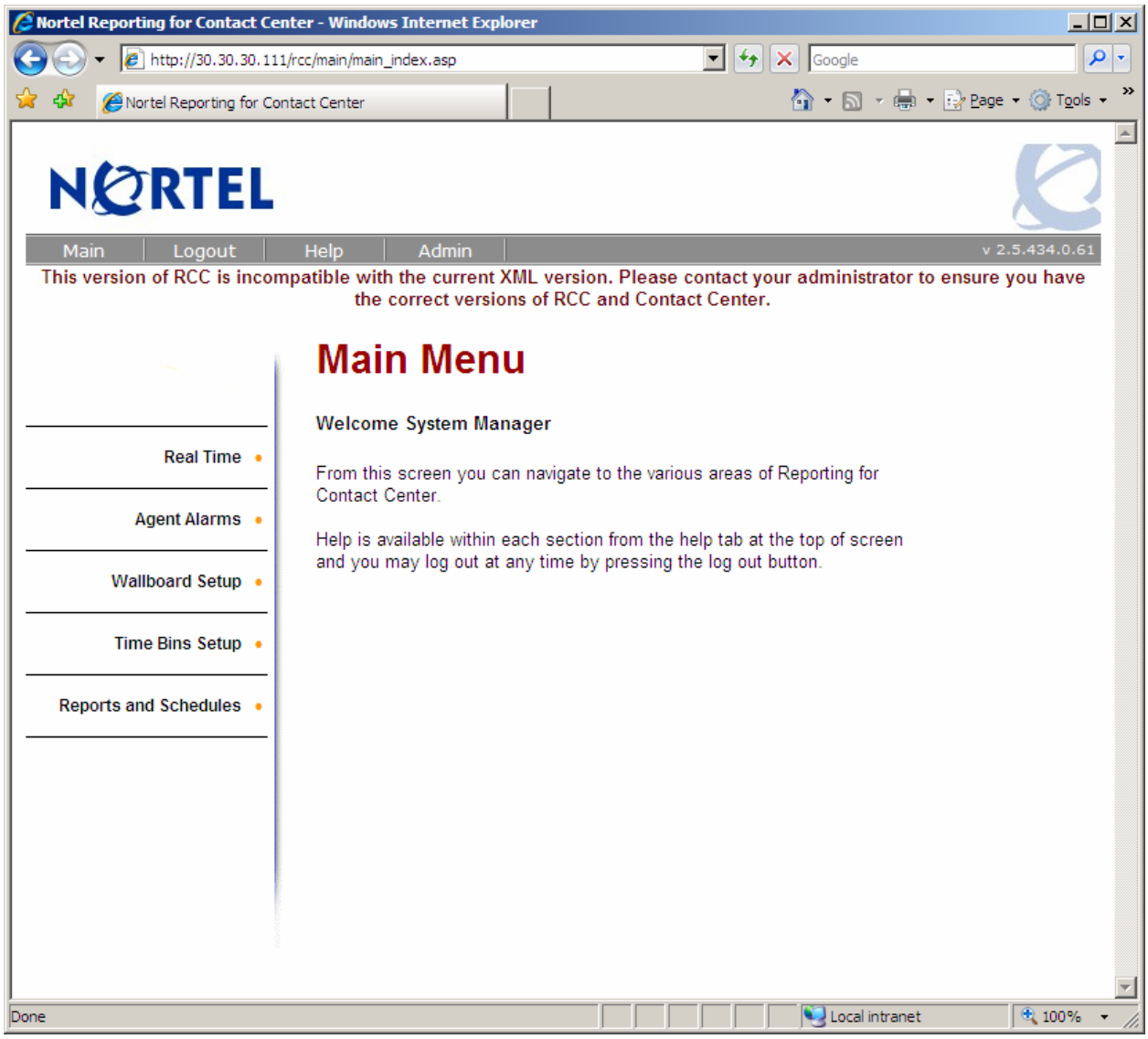

Nortel Reporting for Contact Center - Windows Internet Explorer
http://30.30.30.111/rcc/main/main_index.asp
Google
Nortel Reporting for Contact Center
Page
Tools
NORTEL
Main
Logout
Help
Admin
v 2.5.434.0.61
This version of RCC is incompatible with the current XML version. Please contact your administrator to ensure you have the correct versions of RCC and Contact Center.
Main Menu
Welcome System Manager
From this screen you can navigate to the various areas of Reporting for Contact Center.
Help is available within each section from the help tab at the top of screen and you may log out at any time by pressing the log out button.
Real Time
Agent Alarms
Wallboard Setup
Time Bins Setup
Reports and Schedules
Done
Local intranet
100%

Figure 52: Incompatible schema version between RCC and XML error message

After a BCM upgrade, the Reporting for Contact Center client application version downloadable from the BCM will be compatible with the XML schema version on the Contact Center.

Once a new patch is available for download, the user must ensure that the version of Reporting for Contact Center is compatible with the schema version of the Contact Center. See the following section Voicemail patch and RCC.

Voicemail patch and RCC

When applying a voice mail patch, consider the RCC and voice mail in terms of schema. Refer to the release notes for both the voice mail patch and the RCC patch. The RCC patch release

notes will include a voice mail patch dependency, and the voice mail patch release notes will include an RCC patch dependency.

For example, BCM370.125-RCC includes the following dependency:

- Voicemail v.37.01.04.22

BCM370.119-VM includes the following dependency:

- Required patches - BCM_370.125_RCC.61.209

You can safely apply both, and install this version of RCC, without an XML incompatibility problem.

Refer to Upgrade and Patch procedure for the BCM and Reporting for Contact Center on page 119, prior to making changes.

Upgrade and Patch procedure for the BCM and Reporting for Contact Center

Note: Do not use Reporting for Contact Center on a Web Host PC to avoid problems during an upgrade of the BCM, or when applying a voicemail patch or service update.

Refer to the accompanying documentation on the correct procedure to be performed.

Before upgrading the BCM (for example, from BCM 4.0 to BCM50 3.0), just prior to the upgrade, uninstall RCC, refer to the *Reporting for Contact Center Setup and Operations Guide* (NN40040-303), and re-boot the Web Host PC.

Voicemail Patch procedure

Before applying a voicemail patch, check the Release Notes for dependencies if you also need to install a later version of RCC. Uninstall RCC first, and then apply the voicemail patch.

Alternatively, if RCC does not need to be upgraded, however a voice mail patch does need to be applied, stop the RCC Launcher service on the RCC Web Host PC. Apply the voice mail patch.

Glossary 9

Ad Blocking ..... Software that eliminates advertising and other annoyances from Web pages. It detects banner ads by size (typically 60 pixels high) and by the URLs of major advertising sites where the images come from. Such utilities may also be able to eliminate cookies, referrers and animated GIF, which are time consuming to download.

Administrator ..... A Nortel Reporting for Contact Center User who has been awarded Administration rights. These Users can configure core elements of Nortel Reporting for Contact Center that regular Users can not. They can perform such actions as connecting the Web Host PC to the Contact Center, creating other Users, allocating Skillsets to Users, and administer the logging functionality of Reporting for Contact Center on the Web Host PC.

Agent..... Agents are people who handle calls in the Contact Center.

Anti Virus..... Antivirus software identifies, thwarts, and eliminates computer viruses and other malicious software. Some antivirus software can reduce system performance. It may be necessary to disable virus protection when installing or updating software like the Reporting for Contact Center application to prevent improper installation or any installation.

Backup ..... Additional resources or duplicate copies of data on different storage media for emergency purposes.

BCM..... The Business Communications Manager (BCM), a converged voice and data solution, providing a choice of IP-enabled or pure-IP strategy. The applications in this system include telephony, unified messaging, multimedia call center, interactive voice response, IP routing and data services such as firewall and wireless.

Cache..... Pronounced “cash”. A cache is used to speed up data transfer and may be either temporary or permanent. Memory and disk caches are in every computer to speed up instruction execution and data retrieval and updating. These temporary caches serve as staging areas, and their contents are constantly changing.

Browser caches and Internet caches store copies of Web pages retrieved by the user for some period of time in order to speed up retrieval the next time the same page is requested.

CC ..... Abbreviation for Contact Center.

CCRDB ..... Reference term for the Nortel Reporting for Contact Center Database.

CCRS ..... Contact Center Reporting Server, also known as the Application Server, or AppServer. This is the mechanism in the Contact Center that provides Nortel Reporting for Contact Center with the data and statistics that make up the reporting.

CCRS Test ..... Contact Center Reporting Server Test often referred to as the CCRS Test page is used to check the XML from the Contact Center.

CDN ..... Control Directory Number, a virtual directory often associated with a Skillset to act as a controller for incoming calls.

Client PC..... A PC that has network access to the Web Host PC and so can access the Nortel Reporting for Contact Center Web pages through the Web Host PC. Multiple users can, therefore, use Nortel Reporting for Contact Center without having any software other than Internet Explorer installed on their PCs. (The Java Runtime Environment, if required, and the ActiveX Report Viewer are automatically downloaded to the client the first time they are required.)

Create.bat ..... A Windows batch file. When executed, the batch file creates the required virtual directories of Nortel Reporting for Contact Center within IIS.

Firewall ..... A piece of hardware and/or software functioning in a networked environment to prevent forbidden communication in line with a security policy. Firewalls control traffic between different zones of trust, for example, between the Internet (with a zone of no trust) and an internal network (a zone with high trust).

Hard Wallboard..... A stand-alone Contact Center wallboard that does not require installation on a PC.

Historical Reports ..... Collective name for the Reporting in Nortel Reporting for Contact Center based on data that is collected from the Contact Center and stored in the local CCRDB database.

HTTP..... HTTP is a request/response protocol between clients and servers. The originating client, such as a Web browser, spider, or other end-user tool, is referred to as the user agent. The destination server, which stores or creates resources such as HTML files and images, is called the origin server.

IIS..... Microsoft **I**nternet **I**nformation **S**ervices (sometimes, erroneously called *Server* or *System*), is a set of Internet-based services for servers using Microsoft Windows. The servers currently include FTP, SMTP, NNTP

and HTTP/HTTPS although HTTP is the only service used by Nortel Reporting for Contact Center.

Internet Explorer ..... Commonly called “IE”. This is a Web browser that comes with Microsoft Windows. All the administrative and user interactions with Nortel Reporting for Contact Center are conducted through a series of Web pages that are accessed through Internet Explorer browser sessions.

Install Verification Utility (IVU) ..... A utility automatically run after Reporting for Contact Center (RCC) has been installed. This utility checks that all the components of RCC have been installed and setup corretly. Any configuration or setup issues are automatically resolved.

IP Address..... (**I**nternet **P**rotocol address) The address of a device attached to an IP network (TCP/IP network). Every client, server and network device must have a unique IP address for each network connection (network interface). Every IP packet contains a source IP address and a destination IP address.

Java Runtime Environment..... The Java Runtime Environment, or JRE, is a software bundle from Sun Microsystems that allows a computer system to run a java application. This bundle includes a Java Virtual Machine, and a set of standard class libraries.

Logs or Logging..... Text files stored on the Web host PC that collect debug information and XML from the Contact Center.

Microsoft SQL Server 2005 Express..... SQl Server is a multithreaded, multi-user, SQL Database Management System (DBMS).

Offline content ..... Offline content are complete Web pages that have been stored on a computer for browsing when the user is not connected to the Internet.

PC..... A personal computer (PC) is usually a microcomputer whose price, size, and capabilities make it suitable for personal usage.

PDF ..... **P**ortable **D**ocument **F**ormat file. The file format in Adobe's Acrobat document exchange technology. Acrobat/PDF has become the *de facto* standard for document publishing. On the Web, there are countless brochures, data sheets, white papers and technical manuals in the PDF format.

PING ..... **P**acket **In**ternet **G**roper. An Internet utility used to determine whether a particular IP address is reachable online by sending out a packet and waiting for a response. Ping is used to test and debug a network as well as see if a user or server is online.

Popup Window Blocking..... A utility that prevents Web site popups from being displayed. The challenge with this software is to distinguish a valid popup from an advertisement. There are an enormous number of Web pages that launch legitimate browser windows to display additional information, and a popup is a small browser window.

Port Numbers ..... A Software Port (usually just called a *port*) is a virtual data connection that can be used by programs to exchange data directly, instead of going through a file or other temporary storage location. The most common of these are TCP and UDP ports which are used to exchange data between computers on the Internet.

Print Caller Service (PCS)..... An application service within Nortel Reporting for Contact Center whose primary purpose is to control and send to the printer, at the correct time, any scheduled Historical reports.

Proxy Server..... Also called a *proxy*. As the word implies, the proxy server "acts on behalf of" a client and server. This computer system or router breaks the connection between sender and receiver. Functioning as a relay between client and server, proxy servers are used to help prevent an attacker from invading the private network. Proxies are one of several tools used to build a firewall.

Raise a Case ..... The process of raising a problem or question with Nortel Technical Support. A case is raised with Nortel in line with the user's normal support processes, that is, raising a case using the Internet, or contacting Nortel Contact Center to raise a case on the user's behalf.

RCC..... Abbreviation for Nortel Reporting for Contact Center.

Real Time Screen..... Information is available that displays the current states of Skillset Calls and Agents. This information is refreshed approximately every 3 seconds. These displays are called the Real Time screens. Information can also be displayed on hardware and software TCP/IP enabled wallboards, to provide Real Time information to the Contact Center Agents.

Remote Support ..... This is a component of Webex Support Center. This provides a rich and dynamic environment for conducting real-time customer support

sessions over the Web. Nortel Support can view, remotely control, and annotate a customer's applications or entire desktop to analyze and solve problems, thereby enhancing the effectiveness of traditional telephone-based customer support. For example, a customer can be shown how to use an application, or they can troubleshoot it directly on the customer's computer. Files can be transferred to and from a customer's computer to analyze them or to install updates or patches.

RPT ..... Abbreviation for **Rep**or**t** and typically refers to the Historical Report XML stream from the Contact Center.

RT ..... **R**eal **T**ime; this refers to the Real Time XML stream from the Contact Center.

Services..... Administrative tools as part of a management console that run in the background. These service applications are programs, routines, or processes that perform specific system functions to support other programs, particularly at a low (close to the hardware) level. Service applications provide features such as client/server applications, Web servers, database servers and other server-based applications to users, both locally and across the network. Some examples of services are the MySQL4 service, voicemail service, and World Wide Web Publishing service.

Skillset..... Groups of Agents who perform a particular function, for instance, a contact center department, like human resources. Contact Center Skillsets answer and distribute calls to Agents as they become available. Other functionality include, holding calls for different contact center departments, such as sales and technical support.

Software Wallboard ... The full name is *ip***View** Software Wallboard, also referred to as *ip***View** SoftBoard. A Windows software application that provides a software-based, IP-enabled wallboard on the PC desktop of Contact Center Agents. Audible alerts and histograms can be displayed to graphically show changes in Contact Center parameters. The *ip***View** SoftBoard is completely compatible with the *ip***View** Hardware Wallboard and can be configured within the Nortel Reporting for Contact Center application.

Sophos..... A company that produces a range of security software including Sophos Client Firewall and Sophos Anti-Virus, which are aimed primarily at corporate environments. It is available for the latest versions of Microsoft Windows XP/2000. Sophos Client Firewall is a location-aware centrally managed firewall providing added protection from viruses and worms. The Client Firewall is tightly integrated with Sophos Anti-Virus. It stops known and unknown threats by closing all inactive

ports (stopping many internet worms). The Client Firewall isolates infected computers from the rest of the network.

Statistics ..... Data that is displayed in the Real Time screens or in the historical Reports of Reporting for Contact Center.

SUOG..... Set Up and Operation Guide. This is a generic name for, and also forms part of the title of any document that provides the setting up, installation and operation of a Contact Center application or platform, such as the *Contact Center Set Up and Operation Guide*.

Task Manager..... A program that is part of the Operating System which provides information about the processes and programs (tasks) running on a computer, as well as the general status of the computer. It can also be used to terminate processes and programs, as well as change the processes' priority.

TCP/IP..... Transmission Control Protocol/Internet Protocol: a protocol developed by the US Department of Defense for communications between computers. It has become the *de facto* standard for data transmission over networks, including the Internet. TCP and IP are transport and address protocols; TCP is used to establish a connection for data transmission, and IP defines the method for sending the data in packets.

URL..... **U**niform **R**esource **L**ocator, the address that defines the route to a file on an Internet server (Web server, FTP server, mail server, and so on). URLs are typed into a Web browser to access Web pages and files, and URLs are embedded within the pages themselves as hypertext links. The URL contains the protocol prefix, port number, domain name, subdirectory names and file name. If a port number is not stated in the address, port 80 is used as the default for HTTP traffic. An example URL is http://www.nortel.com/servsup/kb/

User ..... A User is a person who has been allocated a Username and Password to allow them to use Nortel Reporting for Contact Center. Users can configure some elements of their usage of Nortel Reporting for Contact Center, but they do not have the same scope for configuration as an Administrator.

Virtual Directory..... A directory defined by name only in Internet Service Manager. All references to the virtual directory are redirected to the real directory, including Users accessing Reporting for Contact Center.

Wallboard..... A Nortel Reporting for Contact Center TCP/IP enabled hardware device that is used to display Real Time Contact Center statistics and messages to Agents and other contact center staff.

Web Host ..... A designated PC on which Nortel Reporting for Contact Center software is installed. The Web Host PC communicates directly with the Contact Center to retrieve Real Time updates (for the Real Time screens and wallboards) and Historical information (for the reports).

XML..... E**x**tensible **M**arkup **L**anguage; defines all data content from the Contact Center.

References 10

1 *Contact Center Set Up and Operation Guide* (NN40040-301)
2 *ipView Software Wallboard Setup and Operation Guide* (NN40010-500)
3 *Keycode Installation Guide* (NN40010-301)
4 *Reporting for Contact Center – Reports Explained* (NN40010-626)
5 *Reporting for Contact Center Setup and Operations Guide* (NN40040-303)
6 *Upgrade Guide* (N0060597)

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